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**Teaching undergraduate medical students: exploring
the clinical teacher experience**

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Doctorate in Education (EdD)

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Abstract

Clinical teachers are responsible for the workplace teaching of Bachelor of Medicine, Bachelor of Surgery (MBBS) undergraduate medical students in the UK. The aim of this project is to investigate how clinical teachers experience their role within the foundations of clinical practice (FoCP) rotation of an undergraduate MBBS medical degree offered by a University in the North of England.

Semi-structured interviews were conducted with thirteen clinical teachers involved in the delivery of the FoCP rotation (delivered during year three of the MBBS programme). An inductive approach based on a social constructivist philosophy was adopted, and thematic analysis used to identify emergent themes from participants. Twenty-nine documentary sources from the university were subsequently collected and used to contextualise the emergent interview themes.

The findings of the research indicate that the role of the clinical teacher is opaque and changeable. Those clinical teachers with professional backgrounds other than medicine expressed different support and development requirements than medically trained teachers. Preparation for a clinical teaching role was described as a continuum that extended from a teacher's own undergraduate experience to handover at the end of a teaching post. Although career role models were perceived as important for teachers to plan a career in medical education, there was widespread difficulty in identifying suitable role models.

Theoretical outcomes of this research are the importance of identity as a concept, the value of role models in educational career planning and the representation of clinical teacher role preparation as an extended continuum. This research is likely to have important implications for how clinical teachers are prepared, supported and developed. A better understanding of the relationships between the identities, experiences and development of clinical teachers could assist the University in matching the 'university offer' of staff development and support with teachers' needs.

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This doctoral thesis represents the culmination of five years of study through which I have grown both professionally and individually. This has not been achieved alone. I am indebted to a number of individuals without whom this research would not have been possible, and who I would like to offer formal thanks.

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*Dedicated in loving memory of Edward Miller
A man who prized knowledge and adventure*

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Abbreviations and Glossary

AoME	Academy of Medical Educators. A multi-professional organisation for all those involved in medical education. Provides leadership, promotes standards and offers support to clinical teachers and academics.
ASME	Association for the Study of Medical Education. A UK focused membership organisation dedicated to advancing scholarship in medical education.
BMA	British Medical Association. The professional body and trade union for doctors in the UK.
BU	Base unit. One of four geographical areas where hospitals (usually with one lead hospital, with the other hospitals being secondary) act together as a functional unit to deliver a comprehensive clinical placement to a set group of students each year.
CoP	Community of practice. A collection of people who engage in a shared professional function where members learn from one another, characterised by mutual engagement and the development of shared resources (Wenger, 1998).
CPD	Continuing professional development. The education, training and development activities undertaken by a health professional following successful graduation and professional body regulation, which helps them keep up-to-date and competent in all areas of their practice.
CT	Clinical teacher. A doctor or other health care professional employed in a clinical capacity by an NHS employer, with an additional responsibility for providing clinical teaching to undergraduate medical students.
F1	Foundation year 1. The first year of a two-year programme for doctors who have recently graduated from medical school, which must be completed prior to them becoming eligible to fully register as a doctor in the UK.

F2	Foundation year 2. The second and final year of foundation training which graduates from medical school must successfully complete prior to entering a core, specialty or general practice training programme.
FoCP	Foundations of clinical practice. A course of study forming part of the third year MBBS programme at the University being explored in this research.
GMC	General Medical Council. The independent regulatory body for doctors in the UK. They are responsible for setting educational standards, overseeing the education and training of doctors, managing the UK medical register (including revalidation of doctors every five years) and investigating concerns raised about doctors.
HCA	Healthcare assistant. Provide care to patients in hospitals or other healthcare settings under the direct supervision of a qualified healthcare professional.
HCPC	Health and Care Professions Council. The independent regulatory body for 16 health professions practicing in the UK.
HEI	Higher education institution. An organisation offering programmes at undergraduate degree level or above, and usually (but not always) a university.
MBBS	Bachelor of Medicine and Bachelor of Surgery. A four or five-year undergraduate programme that students are required to pass prior to becoming a foundation doctor.
MDT	Multi-disciplinary team. A group of workers who are members of different disciplines or roles (such as nurses, doctors and administrators) each providing specific services to students.
NHS	National Health Service. The publicly funded national healthcare system in the United Kingdom. The organisation is funded primarily by taxation and provides free or heavily subsidised healthcare to all legal residents of the UK.
NMC	Nursing and Midwifery Council. The regulatory body for nurses and midwives practicing in the UK.

PBL	Problem-based learning. A student-centred pedagogy in which complex real-world problems are used as the medium to promote student learning of principles and concepts rather than by presentation of facts and concepts.
PSA	Professional Standards Authority. A meta-regulator that oversees the nine statutory bodies that regulate health professionals in the UK and social care in England. Although it is an independent body, it is accountable to the UK Parliament.
SD	Sub-Dean. The undergraduate medical educational lead for each base unit. This is an additional responsibility for an NHS employed doctor (usually in a senior or consultant clinical post).
TF	Teaching fellow. An early career doctor who takes up a fixed-term teaching post of a year's duration, employed by and based in the NHS. These posts can be 100% teaching or be split between a clinical post and teaching in varying proportions.
TSE	Teaching Support Environment. The intranet site provided and administered by the university for all clinical teachers and allied educational staff across the regional medical school. Password protected, it contains news and updates, teaching resources and university programme documentation.

1 Chapter 1 – Introduction and Background

1.1 Introduction

The aim of this research is to explore the experiences of clinical teachers associated with the foundations of clinical practice course within an undergraduate medical degree offered by a single university in the North of England. These clinical teachers are not employed or managed by the university, as they are NHS employees who usually conduct teaching in addition to holding a clinical role. As the clinical placement aspect of undergraduate medical training is so important, and these clinical teachers play such a key role, it is essential that the university understands how they experience their role in order that suitable support and training mechanisms can be implemented.

The purpose of this chapter is to provide the reader with a contextual overview of undergraduate medical education in the UK, with a specific focus on:

- The time commitment of medical training.
- The political climate around medical education.
- Financial cost of medical education.
- The roles and regulation of clinical teachers.
- The identity of clinical teachers.
- Preparation and support available for the clinical teaching role.

Subsequently, the research rationale is presented, the personal perspective and background of the researcher described, and the research context defined. The chapter concludes with an outline of the thesis structure.

1.2 Medical education in the UK

As far back as the very beginning of the 20th century, William Osler (1904) suggested that in order for the practice of medicine to be fit for purpose, the educational emphasis had to be on bedside teaching rather than classroom learning:

‘Ask any physician of 20 years’ standing how he has become proficient in his art, and he will reply, by constant contact with disease; and he will add that the medicine he learned in the school was totally different from the medicine he learned at the bedside’ (Osler, 1904, p.881).

This principle has become enshrined in undergraduate medical education in the present day. In the UK, the General Medical Council (GMC) holds the main regulatory role for undergraduate medical education and sets the standards with which all medical schools must comply. In the past, regulatory bodies such as the GMC, had a mode of governance that was largely based on tradition and their policies were not easily understood by members of the public (Allsop and Jones, 2018). This is no longer the case. High profile cases such as the *Shipman Inquiry* (DoH, 2007) and the *Francis Report* (Francis, 2013) have highlighted the importance of using and sharing information in a more transparent way in order to identify and act to mitigate potential risks to the public. Since 2002, the Professional Standards Authority (PSA) has acted as a meta-regulator of the health professions and social work and has been classed as an independent agency since 2015 (Allsop and Jones, 2018). A welcome consequence of the sector-wide increase in transparency and accountability resulting from the introduction of this extra regulatory layer is the increase in information available concerning the policies and practices of health professions. For example, in their *Tomorrow's Doctors* report (GMC, 2009b) the GMC made very clear that workplace learning is an essential part of any undergraduate curriculum:

'The curriculum will include practical experience of working with patients throughout all years, increasing in duration and responsibility so that graduates are prepared for their responsibilities as provisionally registered doctors. It will provide enough structured clinical placements to enable students to demonstrate the "outcomes for graduates" across a range of clinical specialties, including at least one student assistantship period.' (GMC, 2009b, p.2).

The *Tomorrow's Doctors* report was a fundamental step in confirming the importance of the clinical component of undergraduate medical training, but has since been followed with a complementary suite of documents that define standards for the entirety of the student journey:

- **Promoting excellence** (GMC, 2015) sets out the standards for the delivery and management of undergraduate medical education programmes and curricula.
- **Outcomes for graduates 2018** (GMC, 2018c) describes the professional values and behaviours, professional skills and professional knowledge that all newly qualified doctors must be able to know and do. It is supplemented with a list of practical procedures, and aligns (at a basic level) with the *generic professional capabilities framework* (GMC, 2017a) and *good medical practice* (GMC, 2013) documents.

- **Generic professional capabilities framework** (GMC, 2017a) describes the progression from new graduate to postgraduate trainee regarding educational outcomes and capabilities, as doctors move towards full compliance with the *good medical practice* (GMC, 2013) document.
- **Good medical practice** (GMC, 2013) describes what it means to be a good doctor, in relation to standards such as patient care, professional knowledge, patient care, working relationships and professional integrity. These are the standards that all doctors practicing in the UK are required to uphold.

In practice, this means that undergraduate medical students have early clinical experience (in the form of hospital and GP visits) infrequently in the early years of their studies, moving to extensive and extended clinical placements in the later years, and culminating in a short assistantship immediately preceding graduation. This assistantship involves working closely with a foundation doctor and an undergraduate supervisor in order to facilitate transition to their own foundation post in a few months' time (Braniff *et al.*, 2016).

Clinical placements are an essential component of the undergraduate curriculum, yet one which no university is able to provide without substantial NHS involvement and a shared commitment to providing high-quality clinical training (Health Education England, 2018). These clinical placements are a cornerstone of undergraduate medical training, and the clinical teachers who deliver that training therefore have a very important role (Taha and AlHaqwi, 2015).

1.2.1 Time commitment

The educational journey to becoming a licenced doctor (one that is registered and licenced to practice by the General Medical Council) in the UK is a long one (see Figure 1). From starting an undergraduate medical degree to commencing specialty training takes between 6-8 years, with potentially another 8 years of specialty training in the more complex fields.

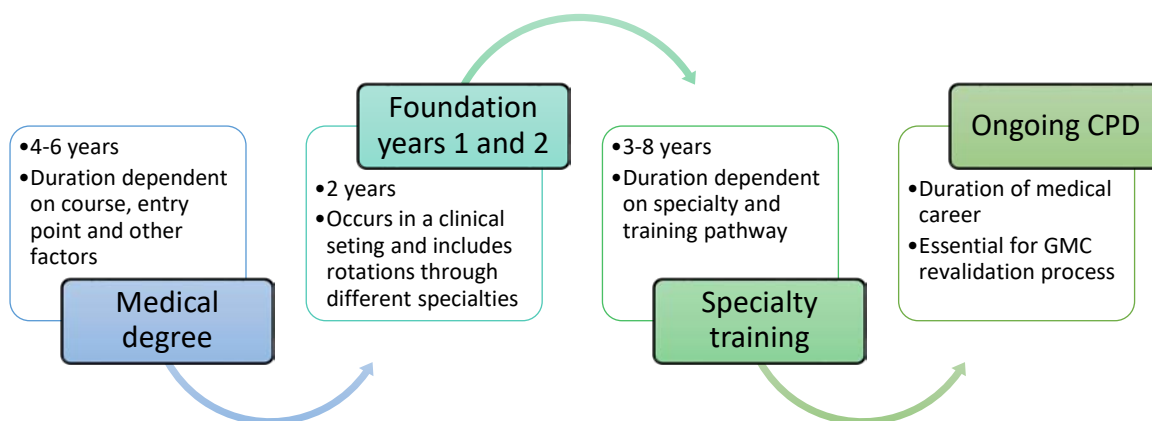


Figure 1 - Training pathways for doctors in the UK (adapted from Roberts and Bolton, 2017)

However, the journey does not end there. The GMC mandates that all doctors must maintain competence and be up to date in all areas of their practice (GMC, 2012a). While the GMC sets no minimum expectation for the amount of continuing professional development (CPD) that is undertaken, it is the responsibility of each doctor to demonstrate how they have maintained their skills and knowledge annually with their employer at appraisal, and then every five years directly with the GMC as part of their revalidation process (GMC, 2018b). If a doctor fails to engage with the revalidation process, or is unable to demonstrate sufficient CPD for their role, then their licence to practice is at risk (GMC, 2018a).

1.2.2 Political climate

The number of undergraduate medical students in the UK has grown dramatically in recent years. Rapid growth of medical student numbers in the UK began to accelerate in the late 1990s and into the early years of this century, from fewer than 5000 students to more than 7,500 each year by 2010 (Centre for Workforce Intelligence, 2012). This dropped to a Higher Education Funding Council for England (HEFCE) target of 6,071 in 2015-16 (HEFCE, 2015), though only 5,880 of those places were filled. This drop in student numbers prompted a report from the Royal College of Physicians (2016) entitled *Underfunded, under-doctored, overstretched: The NHS in 2016*, which set out their concerns that insufficient numbers of doctors were being trained to meet the current demands of the NHS, and that a coherent plan was required to increase the number of medical school training places.

Subsequently, an increase in places was confirmed by the Health Secretary, Jeremy Hunt, in September 2016, who announced an expansion of 25%, equating to up to 1,500 more doctors being trained in England every year from September 2018 (Rimmer, 2018). Such increased numbers lead to an increase in demand for undergraduate teaching in the short term, which will follow through into increased numbers of post-graduate foundation and specialty training places when those students graduate. The potential impact of this additional burden on clinical teachers (some of whom are already struggling to balance their existing undergraduate and/or postgraduate educational role with their clinical commitments) must be considered (GMC, 2017b).

The rising number of training places is not being matched with an increase in the number of clinical teachers available to teach them. According to the General Medical Council, in 2017 the number of doctors in the UK with a current licence to practice was 236,732 and has remained steady for the last few years. However, they also asserted that there was a 'state of unease gripping the UK medical profession' (General Medical Council, 2017, p.06). This unease results from four key factors:

1. The supply of new doctors being trained in the UK is insufficient to meet increases in demands on the NHS.
2. Some specialties are relying more heavily on non-UK qualified doctors. This is further complicated by some specialties (most notably general practice and psychiatry) facing falling applications to specialty training programmes.
3. The UK is becoming a less attractive place for doctors trained overseas to work (for those already here, as well as those thinking of relocating). Britain's impending withdrawal from the European Union is exacerbating this problem further (Esmail *et al.*, 2017).
4. There is pressure on doctors in training (undergraduates) and being trained (post-graduate) caused by increasing workloads and lack of sleep.

Doctors have a professional obligation to contribute to the education and training of their peers and undergraduate medical students, and the vast majority of practicing doctors in both general practice and hospital settings do contribute to the teaching of medical students or junior colleagues (BMA, 2006). However, there is no ultimate requirement for that involvement to be with undergraduate medical students specifically, and there are many doctors who have little interest in undergraduate teaching (Dahlstrom *et al.* 2005). The fulfilment of medical school's mandate to provide workplace teaching and practical experience of the NHS environment therefore relies on the goodwill and motivation of a decreasing number of doctors to teach an increasing number of students.

1.2.3 Financial cost

While the journey from undergraduate to qualified doctor is exhaustive, it is also costly in financial terms. The total cost to the taxpayer of training a doctor to the end of medical school is approximately £163,000 for every medical school graduate (Milne and Braham, 2018). With 7,500 medical school places to be offered every year in England by 2019 (Rimmer, 2018), this represents an overall cost to the taxpayer of over £1.2 billion each year in England alone.

By the time a doctor reaches a consultant grade, and before any additional CPD activities have been provided, there has already been a total investment of £513,151 in doctor training (Curtis and Burns, 2017). With such a large financial investment, retention of trained doctors is becoming a key priority for the UK government (NHS England, 2018). However, Goldacre *et al.* (2001) warned that NHS workforce planners should expect that between 15-20% of home-trained doctors will not be working in the NHS within five years of graduation. Of those doctors choosing to leave the profession, 67% cited working conditions as being the causative factor (Moss *et al.*, 2004). This would clearly indicate that creating improved working conditions might promote the retention of more doctors working in the NHS, which would also ensure that taxpayer money spent on their training is not wasted. There is a large body of evidence to suggest that doctors are motivated to teach medical students (Steinert and Macdonald, 2015, Xie and Kumar, 2014, Thampy *et al.*, 2013). Teaching and clinical roles are interdependent, as clinical teachers are usually required to hold a concurrent clinical role; if clinical teaching opportunities are accessible and well supported then they may provide the respite from front line medicine that could encourage them to remain in a medical career.

1.2.4 The roles, regulation and recognition of clinical teachers

Within the wider health sciences, the concept of clinical teaching has undergone much iteration over the course of time, as well as across professional and disciplinary boundaries. The clinical teacher can be defined as being in a supportive and pastoral role - a teacher, coach, guide, facilitator, adviser, soul mate and counsellor (Greggs-McQuilkin, 2004). Alternatively, it may be considered to be authoritative and academic in nature – as advisor, networker, sponsor, resource consultant, role model and assessor (Price, 2004).

1.2.4.1 Medicine

In terms of the precise role, responsibilities and personal qualities of clinical teachers, there are no nationally recognised or consistent guidelines in the UK. Within medicine, the GMC does not define

the role of a clinical teacher or regulate the activity of teaching. Clinical teachers of undergraduate medical students are not required to undertake a formal training programme or attend updates in order to teach. In 2012, the GMC (2012b) published a document which outlined arrangements to formally recognise and approve undergraduate medical teachers for the first time. This process is summarised in Figure 2.

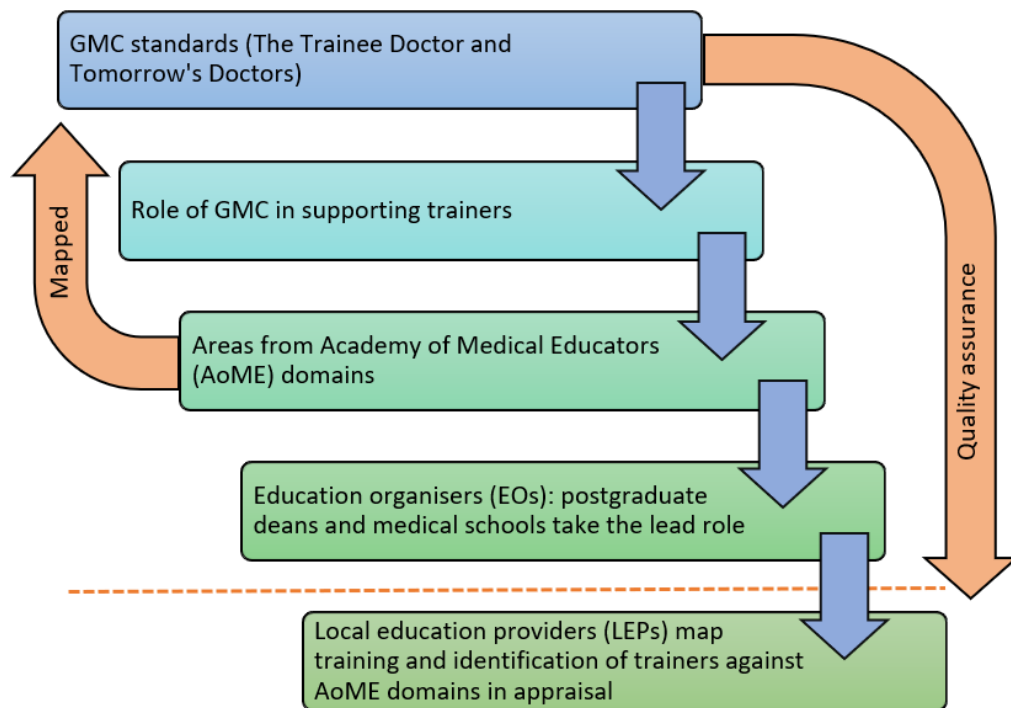


Figure 2 - GMC process for approval and recognition of trainers (adapted from GMC, 2012b)

Although this development may be considered as a valuable indicator of esteem for the role of teachers, the scheme does have limitations. Firstly, the recognition process only applies to lead coordinators and not to other doctors who contribute to teaching, even if that contribution is substantial (FSRH, 2015). In practice, that may result in a hospital rotation being delivered by upwards of 100 teachers yet only one of them is a GMC recognised teacher. When compared to postgraduate training (where all trainers are formally recognised for their role) there is a risk that parity of esteem between postgraduate and undergraduate teaching may not be achievable. This may lead to doctors prioritising postgraduate teaching ahead of undergraduate teaching in busy rotas, placing increasing pressure on undergraduate teacher recruitment. Another problem with this approach is that only GMC registrants are able to be recognised. Therefore, if a clinical teacher is not

medically trained they cannot undertake the process regardless of the seniority of their educational role, which clearly leaves a gap in provision for these professionals.

It is interesting to note that although there is no set role or training programme for clinical teachers within medicine, the GMC, Higher Education Academy (HEA) and Academy of Medical Educators (AoME) all include standards around the same five key areas of developing learning opportunities, educational leadership, student support, staff development and scholarship and assessment. The broad role of the clinical teacher in medicine can therefore be inferred from these standards (see Table 1).

Generic theme	GMC themes	HEA dimensions	AoME core values and practice domains
Developing learning opportunities	Theme 1 – ‘Learning environment and culture’	A1 – ‘Design and plan learning activities and/or programmes of study’	‘Designing and planning learning’
Educational leadership	Theme 2 – ‘Educational governance and leadership’	A2 – ‘Teach and/or support learning’	‘Educational management and leadership’
Student support	Theme 3 – ‘Supporting learners’	A4 – ‘Develop effective learning environments and approaches to student support and guidance’	‘Teaching and facilitating learning’
Staff development and scholarship	Theme 4 – ‘Supporting educators’	A5 – ‘Engage in continuing professional development in subjects/disciplines and their pedagogy, incorporating research, scholarship and the evaluation of professional practices’	‘Educational research and scholarship’
Assessment	Theme 5 – ‘Developing and implementing curricula and assessments’	A3 – ‘Assess and give feedback to learners’	‘Assessment of learning’

Table 1 - Summary of standards for clinical teachers. Adapted from GMC (2015, pp.6-7), HEA (2011, p.3) and AoME (2014, p.6)

1.2.4.2 Nursing

The Nursing and Midwifery Council (NMC) is the regulatory body for nurses and midwives in England, Wales, Scotland, Northern Ireland and the islands of the United Kingdom. In contrast to the GMC, the NMC has very tightly defined terms and expectations for mentorship arrangements for nursing and midwifery students (NMC, 2008). All students on NMC approved pre-registration nursing programmes must be supported and assessed by mentors. The final assessment of practice prior to a student being successful on their chosen programme must be made by a sign-off mentor, for whom there are clearly defined requirements stipulated by the NMC (NMC, 2012). The requirements for training and on-going registration for nursing sign-off mentors are standardised across the nursing profession and are independent to the requirements made by individual HEIs. Transferability of sign-off mentors between different employers is therefore uncomplicated, as the role remains consistent with the standards set by the NMC.

1.2.4.3 Health professionals

Clinical teaching is more of a complex area when considering health professionals (other than nurses and doctors), which are registered by the Health and Care Professions Council (HCPC). The HCPC acts as the regulatory body for 16 diverse health and care professions (HCPC, 2016) including social workers, podiatrists, paramedics and physiotherapists. The HCPC *Standards of Education and Training Guidance* (HCPC, 2014) provide educational establishments with generic guidance on the design of pre-registration programme curricula across the range of registered professions. This in turn is supported by a specific *Standards of Proficiency* (SOP) document for each of the individual professions. The HCPC identifies the 'practice placement educator' as a person who is responsible for a student's education during their period of clinical or practical experience (Gopee, 2015), which is the equivalent of the clinical teaching role in medical education.

In common with the GMC, the HCPC does not set down specific standards that it considers essential for practice placement educators to be able to undertake their role effectively. The HCPC gives a very broad indication to educational providers on the standards it expects them to maintain in relation to practice education, in the form of quality indicators (HCPC, 2014). These quality indicators are necessarily broad and generic in their approach, as is consistent with a large regulatory organisation seeking to provide standard guidance to a diverse range of registrants. However, this approach makes HEIs and individual programme teams within those institutions responsible for setting their own standards and monitoring processes for each of the relevant programmes of study. They then cascade this information to clinical education leads in health care provider organisations,

who then advise all clinical teachers within that organisation. A problem with this approach is that if the information dissemination process breaks down, front-line clinical teachers across the medical and other health professions may be in the position of supervising students with limited guidance or understanding of what the university programme actually entails (Walkington, 2005).

A further complication is that each health profession has its own professional body (such as the College of Podiatry and the Chartered Society of Physiotherapy) many of which also provide profession specific guidance and obligations for practice supervisors. Within these professional bodies there are considerable differences in requirements between the professions, although this is changing over time. As clinical teaching becomes a more central part of many health care professionals training, the quality indicators for clinical placements are becoming more explicit. Many health professions are adopting similar models for practice placement educator selection, training and on-going registration; the Accreditation of Clinical Educators Scheme (ACE) for physiotherapy (CSP, 2004), the Accreditation of Practice Placement Educators scheme (APPLE) for occupational therapy (BAOT and COT, 2013) and the Society of Chiropodists and Podiatrists (SCP) and the Society of Radiographers (SoR) guidelines are all very similar in structure (Austerberry and Newman, 2013).

The regulation of health care assistants and workers in similar support grades is more complex than for that of health professions with a named regulatory body. Historically, responsibility for regulation and decisions regarding training needs was mostly led by individual employers, but they have expressed concerns regarding the safety, costs and efficacy of this approach (Saks and Allsop, 2007). No universally accepted training pathway exists for support workers and, as increasing numbers of health care assistants gained employment to support a reducing number of nurses, demand for regulation of these staff has escalated (Storey, 2007). There has been extensive debate on how this regulation might be achieved, whether statutory or employer-led, voluntary or compulsory, who should pay for it and which regulatory body may be best placed to oversee it (Duffield et al., 2014). This is a dilemma that is as yet unresolved, but all potential costs and benefits to the public of a comprehensive programme of state regulation of individuals working at all levels in the health sector would need to be fully investigated prior to any implementation (Davies, 2004). In addition to the financial burden, concerns have also been raised regarding the potential bureaucracy associated with the introduction of a register (Saks, 2008). It would appear from the literature that regulation of support grade staff will happen, but the timescale is as yet unclear.

1.2.4.4 Lack of standardisation

While there are many areas of good practice evident in undergraduate health profession workplace education, due to the expansive and fragmented nature of the guidance and provision it is difficult to distil the actual role of 'clinical teacher' to a single set of best practice guidelines. It is also not possible to identify the role that a clinical teacher in any individual context will fulfil or a universal role preparation or development plan. The result of this lack of standardisation is that clinical teachers of undergraduate medical students are essentially responsible for identifying their own development plan, although it does afford institutional flexibility (for universities and NHS organisations) to target development activities to their local requirements.

However, there are some flaws with not having a standardised national training pathway for clinical teachers. There is an assumption that teachers are aware of their current and future role requirements and willing and able to reflectively identify their own development plan; development activities are essentially undertaken as a private enterprise or according to imposed institutional values rather than as progression along a common national pathway (Young, 2006).

1.2.5 Identity

Identity may be defined as how a person understands themselves in relation to other people and how they fit into the world around them (Beauchamp and Thomas, 2009). This concept was summarised in the words of Karl Marx (1859, preface), who declared:

'It is not the consciousness of men that determines their existence, but their social existence that determines their consciousness'.

Identity as a concept is shaped by different influences, both internal and external. Internal influence is derived from a core sense of the 'self', which in turn is influenced by 'multiple dimensions of identity' (Jones and McEwen, 2000, p.405) including identity dimensions (such as religion, sexual orientation and race) and contextual influences (such as life experiences and family background). External influences arise from the clinical working environment which consists of many different social groups, including professionals from different healthcare backgrounds, different clinical specialties and different workplace teams (Burford, 2012).

The process of adopting a professional identity is further complicated for clinical teachers, as they take on a teaching role alongside their clinical health care responsibilities. They have to develop dual and interchangeable identities of both teacher and clinician. In this case, the identity of 'teacher' not only has to be developed, but then integrated within that existing clinical identity (van Lankveld *et al.*, 2016). The concept of identity has been demonstrated to impact on teachers fulfilment, self-efficacy, adaptability and resilience (Zembylas, 2003), and therefore is an important keystone in the exploration of experience.

1.2.6 Preparation and support of clinical teachers

The British Medical Association (BMA) asserts that all doctors are professionally obligated to play a role in the training of undergraduate medical students, fellow doctors and other non-medical healthcare professionals (BMA, 2016). However, it makes no staff development requirement on the teachers of undergraduate medical students (unlike teachers of foundation doctors who must undertake a mandatory 'training the trainers' programme every three years). The only responsibility that teachers of undergraduate students have is to '....acquire the appropriate knowledge, skills and behaviours required to teach, train and provide CPD' (BMA, 2016, p.1). This guidance from the BMA is consistent with that of the General Medical Council (GMC) in their 'promoting excellence: standards for medical education and training' (GMC, 2015), the HEA (HEA) in their 'UK professional standards framework' (HEA, 2011) and the professional standards proposed by the Academy of Medical Educators (AoME, 2014). While each of these professional organisations promote quality in medical education and recognise the desirability of teacher-specific staff development, none set out a formal schedule for how, where or when this development should occur. Despite the omission of a recognised programme, there is a high degree of overlap of the standards of each organisation (as previously depicted in Table 1).

Published research literature in medical education is similarly inconsistent regarding how best clinical teachers should be prepared for their role. Benor (2000) recognised that the role of the clinical teacher in the future would evolve and diversify over time into the 'types' of clinical teachers now present within the medical education field:

- **Specialists** to act as a knowledge resource
- **Evaluators** engaged solely in assessment
- A small number of '**process**' teachers, who will act as teacher, tutor and guide

Within the University where this research was undertaken, these types of clinical teacher are already in existence. Subject specialists (often of consultant grades) take the lead role within each of the MBBS courses (series of clinical rotations) and feed into University quality assurance systems and working groups to determine curriculum syllabus. Many clinicians are not involved in much of the day-to-day teaching activities but are active in relation to assessments. These are often more senior grade staff, who are very experienced with the requirements of assessment, but who have heavy clinical workloads that preclude greater teaching input. Finally, the 'process teacher' role proposed by Benor (2000) aligns well with the role of teaching fellows. The teaching fellows are with the students every day, do much of the small group and simulation teaching and accompany students on the wards. By virtue of their near-peer status (Qureshi *et al.*, 2013) and the close relationships they forge with students, they are well placed to act as guides and mentors.

According to Benor (2000), each type of teacher requires staff development specific to their role, rather than a single generic teacher training programme. This assertion is supported by the findings of a systematic review of fifty three research papers by Steinert *et al.* (2006) which recommended that staff development for clinical teachers should be a wide and varied planned programme to support teachers in their individual roles. A range of activities was suggested to enable appropriate 'targeting' of training to teacher. Conversely, there are authors (Breckwoldt *et al.*, 2014) who have conducted research which rejects the notion of teacher training for clinical teachers entirely. They postulated that difficulties in integrating the newly learned teaching strategies could result in trained teachers receiving more negative student evaluations than their non-trained colleagues. The varied nature of the medical teacher role is unique within healthcare education, and so teacher training for doctors cannot easily be compared with those of other health professionals.

Without a single, universally recognised and accepted definition or schedule for clinical teacher development programmes, it is very difficult for individual clinical teachers to evaluate and select current provision against their own needs and role as they have no reference point. The nature of such 'unknown unknowns' has been highlighted as a particular problem when developing evidence based policy (Pawson *et al.*, 2011), as while the aim is to transform the unknown factors to known ones (with the intention of developing interventions to support them), the process is cumulative, making clarity and certainty problematic. To further complicate matters, the array of curriculum content of teacher development programmes is not the only element that a teacher needs to consider; there are also several different delivery methods described in the literature (see Figure 3).

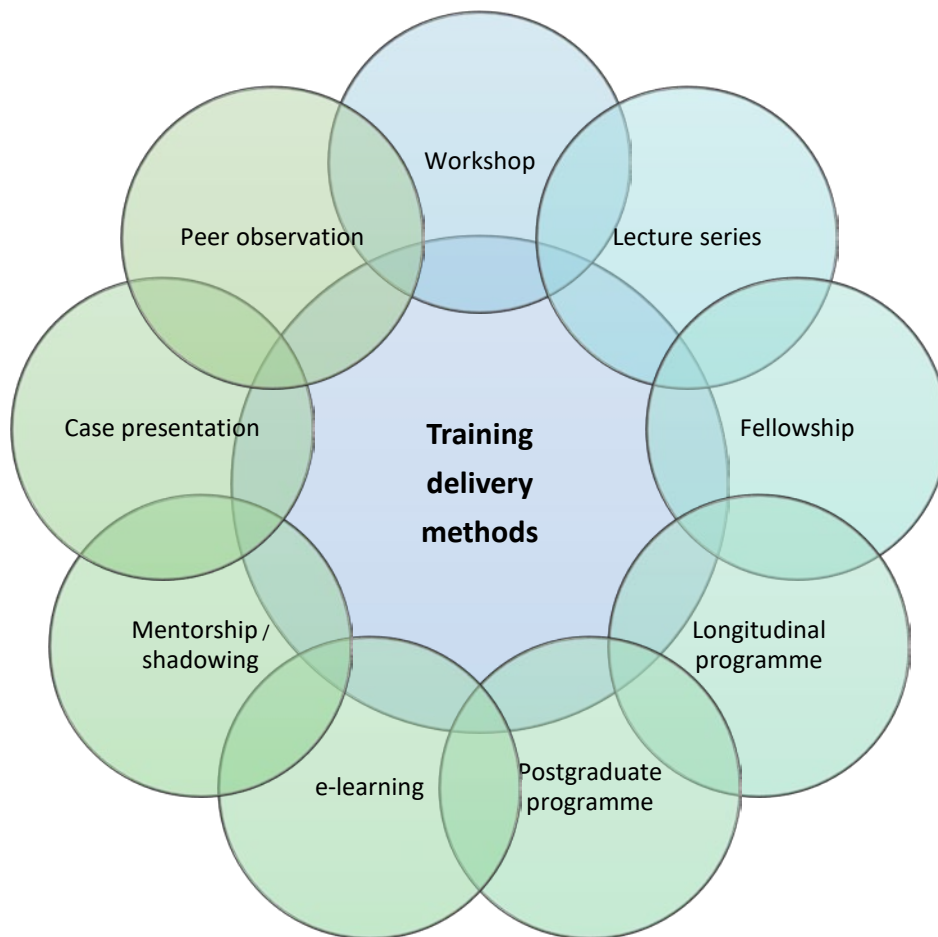


Figure 3 - Training delivery methods for clinical teacher staff development. Adapted from Steinert (2005), Steinert et al. (2006) and Finn et al. (2011)

The choice of topic, delivery method, frequency, level and combination of staff development activities rests ultimately with each individual clinical teacher, where they are responsible for both interpreting and predicting their own development needs and locating appropriate training provision to bridge any gaps (Akerlind, 2007). As Steinert (2005) confirmed, multiple strategies are able to meet multiple objectives, and there is no single ‘correct’ approach.

In addition to personal reflection, Knight *et al.* (2006) outlined other factors that may drive development, including student feedback, the teacher’s own experience of being a student and employer or higher education requirements. Motivation of the teacher has a role in staff development; if a local educational regime fits with the teachers’ notions of good quality teaching, this will contribute positively to their future development. However, if they encounter difficulties in implementing new found teaching skills this could undermine their enthusiasm in the future (Trowler and Cooper, 2002, Kim, 2004).

Knowing how to develop as a clinical teacher is fundamentally a personal issue, with many different influencing factors. Although institutions of higher education or employers may impose their own standards, it is ultimately the teacher who is responsible for ensuring that they are sufficiently skilled to effectively undertake the specific role that they have been assigned.

There are a number of different local stakeholders who may influence the development of clinical teachers (see Figure 4).

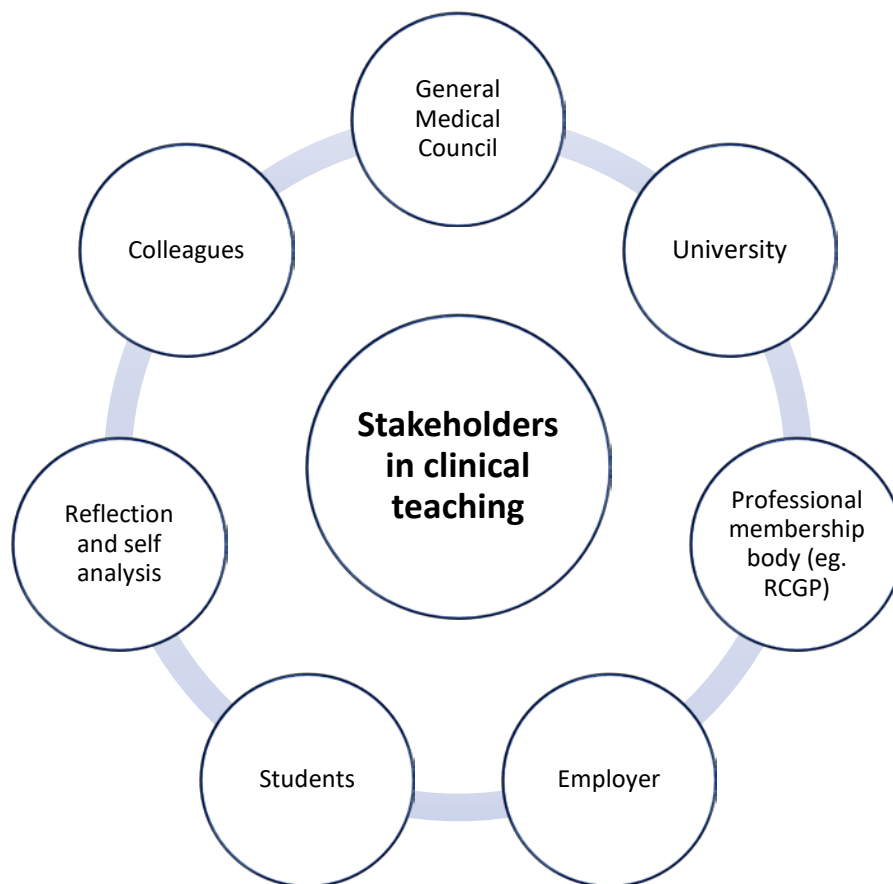


Figure 4 - Stakeholders who may have an influence on staff development choices

1.3 Personal perspective and research rationale

I first became interested in how clinical teachers experience their role and what motivates them when I was appointed as a podiatry placement co-ordinator for a BSc (Hons) Podiatry programme. Until that point, NHS placements were a very limited part of the programme (limited to a single week

of observation in the final year). I was tasked with developing hands-on placement opportunities throughout the programme in partnership with local NHS podiatry departments. The establishment of these placements was a challenge. I faced resistance based on lack of clinical teacher confidence, the perceived challenge (with regard to resources, teaching skills and ability, academic knowledge and being able to answer questions) and logistically from departments that had never had to find time or space for students before. This was by no means unique, as placements within the podiatry profession were still in their infancy at that point, so many other podiatry undergraduate programmes had similar challenges, with no established 'custom and practice' to refer to (Morrison *et al.*, 2011).

Building on this experience, I focussed my MSc research (Bussey, 2010) on reviewing the resulting placements from the student perspective. The findings were surprising to me, as the students valued the attitude of their clinical teacher over the placement content; having teachers who were motivated, enthusiastic and who wanted to be there was the priority. It was clearly not sufficient to simply provide 'a placement'; the accompanying motivated teacher was central to the students' positive experience.

In contrast to podiatry, practical placements for medical students are not new. They have been an integral part of medical training since the establishment of early apprenticeship models during the fifth century in Greece (Fulton, 1953). As practice placements for medical students are well established and not a 'new area', I was interested to explore how this translated to the identity and experience of clinical teachers in a more established curriculum and to discover the lessons that may be learned to enhance and support their experience.

Comparatively little research has been conducted to explore the experiences and perceptions of clinical teachers (Norman and Dogra, 2014) which are essential to fully understand their role. Such an understanding is necessary for both universities and the NHS to put appropriate support and incentives in place to ensure that they can recruit and retain sufficient clinical teachers to teach an ever-increasing number of medical students. Indeed, The British Medical Association (2006, p. 6) stated that 'further research is required into doctors' attitudes to teaching and the implications these have for teacher education', which is a body of work to which this research contributes.

1.4 The research context

This research focused on a single University in the North of England. The University is a member of the Russell Group, which represents 24 leading universities in the UK who share a commitment to high quality research, an exceptional learning and teaching experience for students and forging productive links with both public sector and business organisations (The Russell Group of Universities, 2016).

The programme on which all participants taught is the MBBS (Bachelor of Medicine, Bachelor of Surgery) undergraduate degree. This integrated programme has an intake of approximately 370 students each year and operates clinical experience placements across the entire northern region. Upon successful completion of this five-year programme, students generally progress to NHS F1 junior doctor posts in the UK or abroad.

1.4.1 Foundations of clinical practice

The specific area of work explored by this study was the foundations of clinical practice (FoCP) course that MBBS students undertake in their third year of studies. This fifteen-week course is the first time that students undertake an extended clinical placement. The first two years of the programme is mainly centred on non-clinical (often didactic) delivery of knowledge, with very limited early clinical experience comprising of full and half day visits to hospital and general practice settings.

Immediately following FoCP, students undertake hospital-based essential junior rotations in women's health, child and adolescent health, infection and clinical practice and mental health (of 4 weeks duration each), long term conditions (of 8 weeks duration) and a longitudinal general practice rotation of a half-day session each week in a single general practice throughout each of the other rotations (see Figure 5).

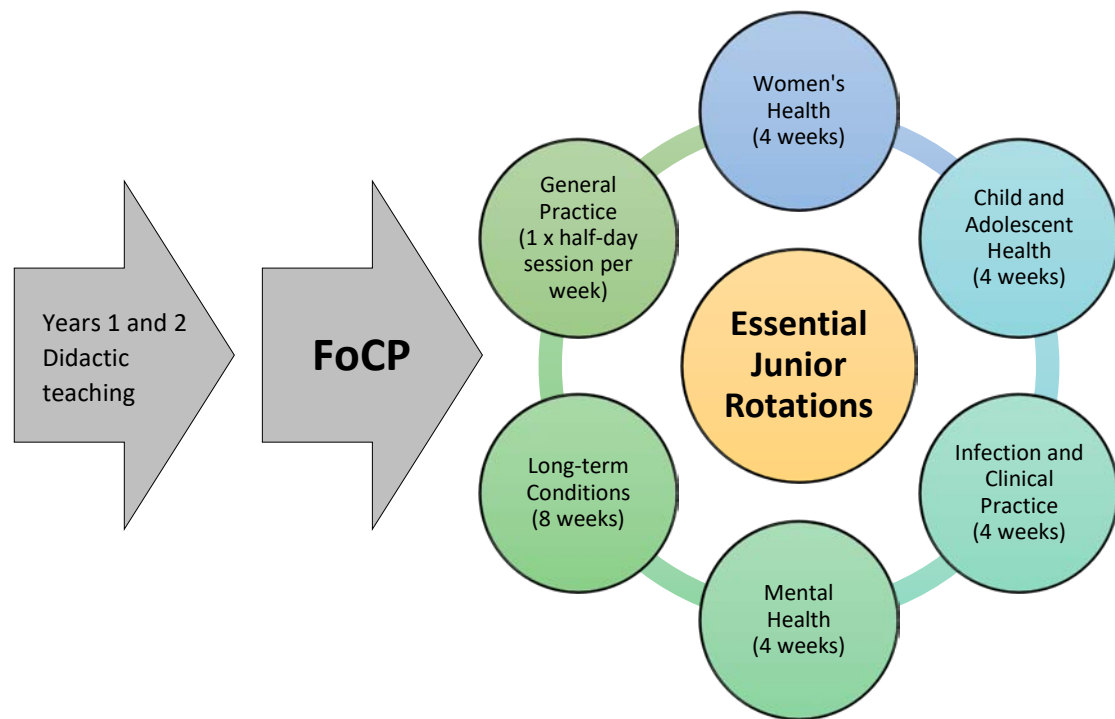


Figure 5 - Foundations of clinical practice course in MBBS context

As such, FoCP is an important course for students, as its focus on health and disease in practice and themed weeks is designed to give students a rapid overview of the culture and practice of medicine in NHS organisations and facilitate their transition from full-time university student in years 1 and 2, to trainee doctor based in the NHS. A full curriculum map for the FoCP course is provided in Figure 6 - Curriculum map of foundations of clinical practice.

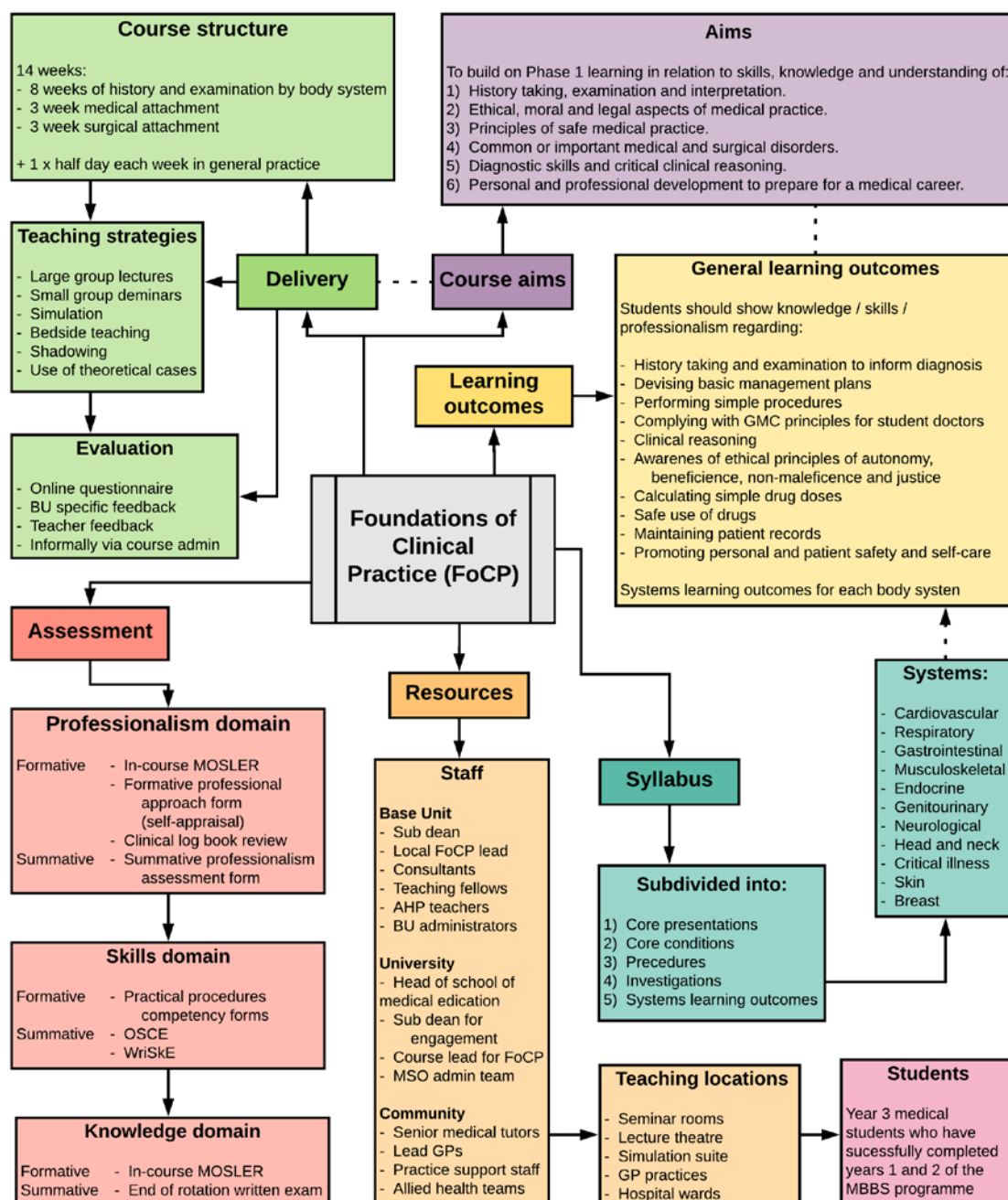


Figure 6 - Curriculum map of foundations of clinical practice (adapted from Newcastle University, 2018)

1.4.2 Organisation, staff and quality assurance

As the university operates a 'regional medical school' over a very large geographical area, the delivery of clinical practice components is split between four base units for ease of organisation. Each base unit contains a main hospital centre, and a varying number of secondary hospital sites. In addition, each base unit contains many general practice surgeries, although all primary care settings operate essentially as a separate unit, regardless of location.

In terms of lines of responsibility, each base unit has a designated Sub-Dean who leads the MBBS teaching provision for all the hospitals within their unit. The Sub-Deans are medically qualified, and usually hold the Sub-Dean appointment in addition to a clinical role in their particular specialty within one of the hospitals within that base unit. Primary care has a separate Sub-Dean (employed by the university) who works across the entire regional medical school area and is supported by senior medical tutors (SMTs) for the North and the South. Both the Sub-Dean for primary care and the SMTs hold their appointments in addition to practicing as general practitioners. Each base unit has a named lead-administrator who is based in the main NHS hospital of each base unit, and they liaise closely with one another and the medical student office staff at the university. Primary care has an administrative coordinator who is employed by the university and also works out of the medical student office. There is a single course director for FoCP (a clinical teacher from one of the base units) who oversees quality and delivery issues across all base units, and each hospital has a FoCP lead. This organisational structure is depicted in Figure 7.

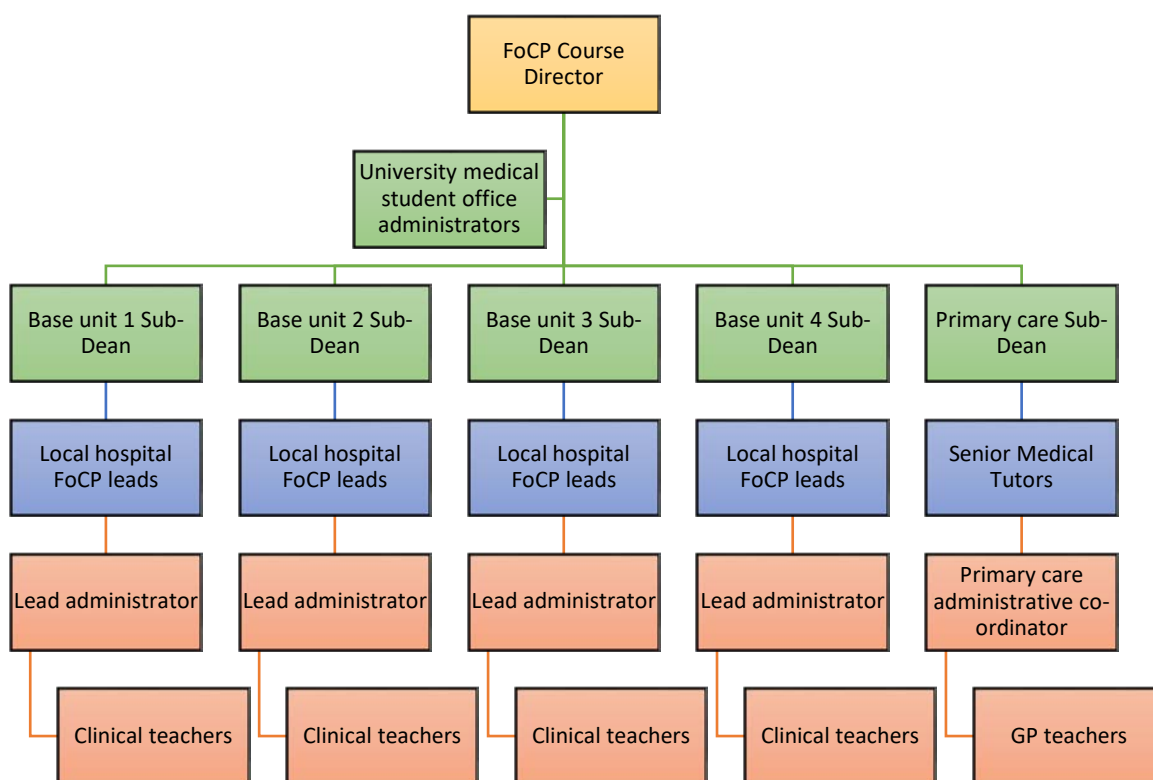


Figure 7 - FoCP organisational chart

Quality assurance and coordination of the course is conducted locally (with local FoCP team meetings) and across the whole programme both formally and informally. The formal annual quality meeting is conducted by the university where each base unit is represented, and the course feedback

is evaluated. The informal clinical teacher led innovation and implementation group meets biannually to discuss teaching innovations and provide networking opportunities. Because of this somewhat complex structure, each base unit is able to tailor the delivery of FoCP to their own clinical settings and teach to the learning outcomes in the most appropriate way for their locale.

1.4.3 Research participants

The participants in this research were (or had been) employed as clinical teachers for the FoCP course. These teachers were responsible for the day-to-day planning and delivery of the course and could work in either the hospital or primary care setting. Clinical teachers can hold their post in a range of different configurations. Some teachers undertake a teaching role in addition to a clinical role elsewhere in the hospital and may or may not have those as protected hours in their job plan. These teachers are drawn from a range of clinical backgrounds (GMC, 2009a), including medically trained doctors, nurses, other health professionals (for example, pharmacists) and non-graduate teachers (such as health care assistants). This range of teachers may also (less frequently) be employed on a full-time permanent basis as clinical teachers without formal clinical hours (although many of those teachers maintain clinical contact and skills by undertaking voluntary clinical sessions when their timetable allows). Both these groups (the full-time teachers and the teaching / clinical split roles) are generally permanent, directly employed by a single NHS organisation and comprise of experienced professionals in their individual clinical roles. They may also have some managerial responsibility for the delivery of FoCP or the support of more junior teaching staff.

In addition to these permanent clinical teachers, there are teaching fellows. The teaching fellow is a clinical teaching role of a fixed-term duration of usually one year, but it can be extended by an extra year by mutual agreement of the base unit sub dean and the teaching fellow. Teaching fellows are usually medically trained doctors at an early stage in their careers. This can be immediately after graduation from the MBBS, but more frequently these teachers have completed their foundation training and are 'taking a break' before they decide on their specialty training programme. The role of the clinical teaching fellow has become increasingly prominent in recent years (BMJ, 2016), and each base unit currently employs a team of teaching fellows. However, in base units that cover a large geographical area, teaching fellows may be working in relative isolation for much of the time.

1.5 Thesis structure

This thesis is presented in six chapters:

- **Chapter 1 – Introduction and background.** This chapter provides an overview and rationale for the research. The nature of undergraduate medical education in the UK is described, alongside an overview of the current political and economic climate that the sector is working within. The chapter concludes with a summary of a research rationale and personal perspective regarding the project and an account of the specific context in which this research was conducted in terms of the university programme and delivery structure. Finally, the research aim and questions are introduced.
- **Chapter 2 – The literature review.** This chapter defines the literature review strategy adopted, critically analyses the literature in order to establish the robustness of the existing knowledge base in terms of key concepts and aspects such as the role, experiences, preparation and support of clinical teachers and how their identity is constructed.
- **Chapter 3 – Methodology, design and methods.** This chapter sets out the contextual framework and ontological and epistemological positions of this research. The research aim and questions are presented, and the rationale for the methodology, design and research methods selected is justified. Approaches to data collection and analysis are specified, and the strategies for ensuring rigour, trustworthiness and transferability are outlined.
- **Chapter 4 – Findings.** The findings of the research are presented around three emergent themes drawn from the interview data regarding the experiences of clinical teachers and the documentary sources obtained from the university. These themes are experiences, identity and preparation, development and support.
- **Chapter 5 – Discussion of findings.** Research findings are discussed in relation to key themes, positioned within the context of the literature review. Theory developed from findings are offered and accompanied by models developed to understand the nature of the clinical teaching role. This illustrates how the findings of this research contribute to new knowledge.
- **Chapter 6 – Conclusions, recommendations and reflections.** The research conclusions are presented alongside reflections on the research process, limitations of the research, contributions to practice and knowledge, recommendations for future research and concluding remarks.

1.6 Conclusion, research aims and questions

Medical education in the UK has had many challenges and difficulties to overcome in recent years. Increasing student numbers, static numbers of licenced practicing doctors and budget cuts, combined with increasing and more complex clinical workloads and no obligation on doctors to teach undergraduate students means that teaching may not be a priority for practicing clinicians. The incentives for doctors to come forward to teach must therefore be cogent in order to ensure sufficient numbers of clinical teachers are available to teach medical students. This is a problematic area that needs exploration in order to understand and further develop the role of clinical teacher.

Therefore, the aim of this project is to investigate how clinical teachers experience their role within the foundations of clinical practice (FoCP) rotation of an undergraduate medical degree offered by a University in the North of England. There are two main research questions and a number of sub-questions:

1. How do clinical teachers experience their role?
 - What do clinical teachers think their role is?
 - How do clinical teachers perceive their identity as a teacher, and to what extent does that integrate with their identity as a clinician?
 - How do differences in professional background impact on the experiences or perceptions of clinical teachers?
2. How are clinical teachers prepared for and supported in their role?
 - How do healthcare organisations and the university prepare, support and develop their clinical teachers?
 - What do clinical teachers consider important in terms of training, support and development?
 - To what extent do the perspectives of clinical teachers and organisations align regarding preparation, support and development?

2 Chapter 2 – Literature Review

Chapter 1 provided an introduction to the research. The background and context of medical education in the UK was presented, drawing on policy and other documentation. The research rationale and my personal interest in the research topic was described and the research questions outlined. This chapter provides a critique of research that relates to the research questions, with a view to establishing what is already known about this subject and contextualising where this research sits in relation to the wider field of published work.

2.1 Literature review strategy

The primary challenge for the literature search was the quantity of research exploring practice-based education. Although much work had been undertaken from a student or HEI perspective of what makes a good quality teacher across a range of health care professions, there was much less from the teachers' perspective. As such, the initial search was not confined to medical education, but encompassed work from other health care professions.

A further consideration was that within the literature, there was a wide range of terminology and nomenclature regarding the role of practice-based teachers of undergraduate health care students. For the purposes of this research project the term 'clinical teacher' was used to identify this role, although the literature search was not limited to only this term, thus enabling as thorough a search as possible to be undertaken. As a result of the strategy adopted, three elements were identified as key. These elements formed the basis of the literature review and are presented in Figure 8.

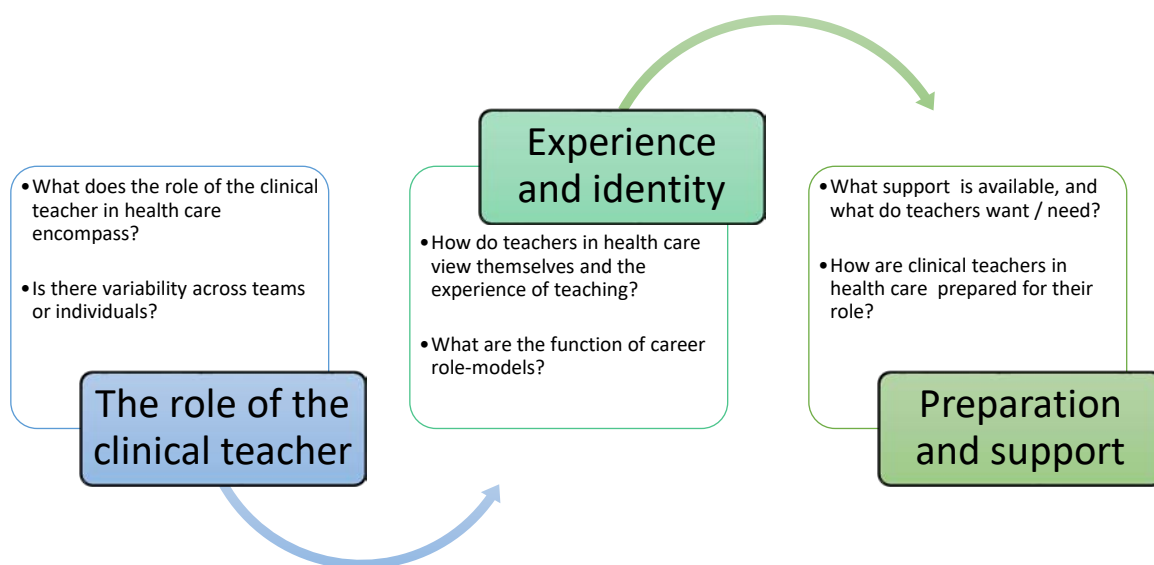


Figure 8 - The three elements of the clinical teacher role investigated in this literature review

2.1.1 Search strategy

The initial search was conducted using very broad terms to obtain as wide a literature base as possible. Search terms including 'clinical teacher', 'medical teacher', 'medical educator', 'clinical educator', 'medical education', 'clinical education', 'experience', 'support', 'development', 'continuing professional development', 'doctor' and 'identity' were entered into online research databases. The databases used were CINAHL, PubMed, PsycINFO, Education Resources Information Centre (ERIC), British Nursing Index (BNI) and Web of Knowledge.

Following the initial search, references cited within the research papers were examined to identify previously undiscovered sources. As the research questions and ideas for the study became more refined over the course of this investigation, I frequently returned to the literature to ensure congruence with the established literature base and that any relevant research occurring during the study was identified.

The purpose of the literature review was to identify and define the key influences and theoretical lens through which each of the key areas being investigated had been viewed in the existing literature, to contextualise the notions of identity and professional development of clinical teachers specifically within the wider field of research and provide a critical synthesis. A breakdown of the research papers included in the literature review is provided in Table 2 overleaf.

Breakdown of research papers critiqued in literature review			
Theme	Number of papers	Coding of sources	Appendix
Role of the Clinical teacher	18	R1 - R18	8.1 Appendix 1 – Summary of literature pertaining to the role of the clinical teacher
Experiences	11	E1 - E11	8.2 Appendix 2 – Summary of literature pertaining to the experiences of CTs
Identity	15	Id1 – Id15	8.3 Appendix 3 – Summary of literature review pertaining to identity
Preparation and support	18	PS1 – PS18	8.4 Appendix 4 – Summary of literature pertaining to preparation and support of CTs
Total:	62 papers		

Table 2 - Breakdown of research papers critiqued in literature review

2.1.2 Inclusion and exclusion criteria

The focus of this research was the experience of clinical teachers within the context of teaching undergraduate medical students during their foundations of clinical practice course. Therefore, research that explored programme development or specific teaching strategies pertaining to medical education was excluded, as the experience of clinical teachers was not the topic of these papers. Although interesting background reading, such papers were found to mainly emphasise elements of educational theory rather than the actual experience of teachers in their roles, which were the elements I was seeking to explore. The inclusion and exclusion criteria for the reviewed research papers are shown in Table 3 overleaf. Unless otherwise indicated in the text, the term ‘clinical teacher’ refers to a teacher of undergraduate medical students, operating in a clinical setting.

Inclusion Criteria	Exclusion Criteria
Published in the English language, or English translation available	Not published in the English language, and no translation available
Published or conducted (in the case of grey literature) in the last 25 years	Published or conducted more than 25 years ago. Medical education and NHS services have undergone significant changes in recent years, and older research may no longer be relevant
Original research or systematic reviews	Opinion piece, letters or discussion articles
Focusses on clinical teacher experience or opinion	Focusses solely on an institutional perspective or teaching strategies
Involves participants who are clinical teachers within a health care discipline	Involves participants who are not clinical teachers within a health care discipline

Table 3 - Inclusion and exclusion criteria for reviewed research papers

2.2 The role of the clinical teacher

As stated in the introduction to this thesis, the role of the clinical teacher is both complex and ill-defined by the GMC. Other than broad general competences (AoME, 2014), the specific nature of the role varies between university undergraduate medical programmes and health care employers. As such, it is very difficult to find a definitive formal (and universally recognised) version of a ‘generic clinical teacher’ role description. A review of the literature in this area was therefore particularly useful as a baseline for this research, since an overview of the clinical teacher role could be constructed using the experiences and perceptions of front-line clinical teachers. The richness of the data collected enabled a detailed role description to be developed, which is presented in Figure 9 overleaf.

A total of eighteen research papers published between 1994 and 2018 that most closely fitted the inclusion criteria relating to the role of the clinical teacher were selected for critique. A summary of these papers can be found in Appendix 1 – Summary of literature pertaining to the role of the clinical teacher, research papers R1 – R18.

There was a high degree of congruence between these research papers in how they described the key components of the clinical teacher role, represented by four main themes (outlined in Figure 9):

1. Personal characteristics – including sub-themes of personality, approach, values and soft skills
2. Teaching skills
3. Knowledge and experience
4. Attitudes to teaching

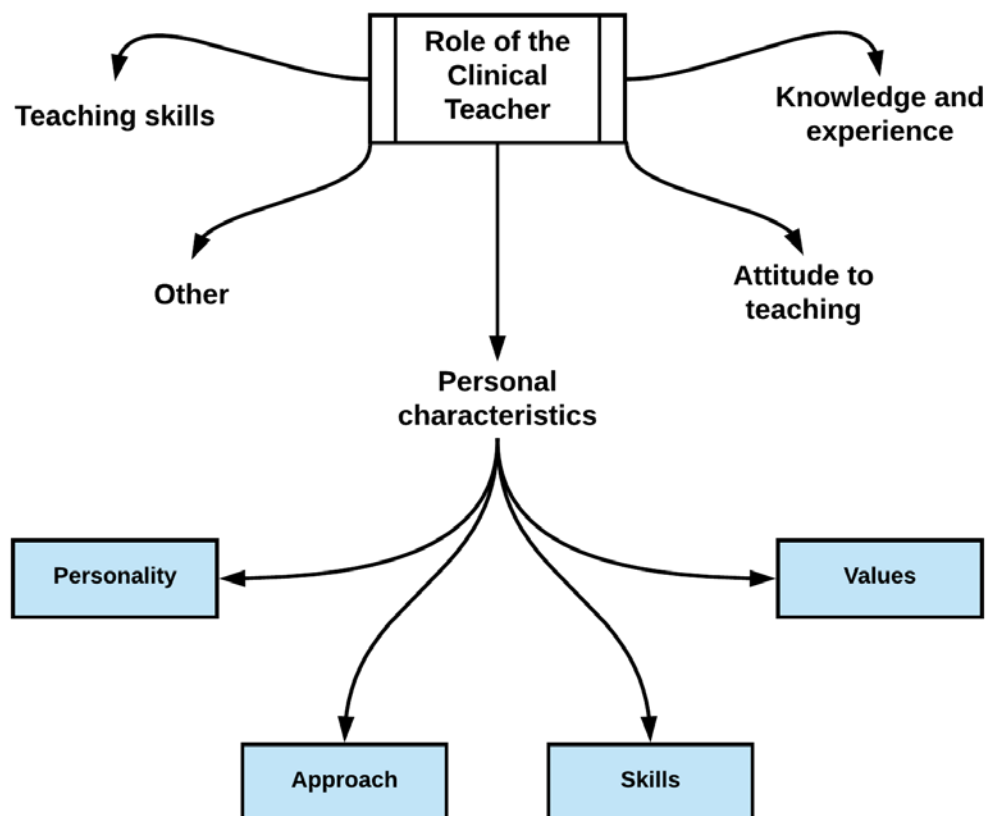


Figure 9 - Themes and sub-themes related to the findings of the research studies critiqued regarding the role of the clinical teacher

The designs of the reviewed research studies were mostly that of small cohorts of participants, associated with a single hospital or university programme using questionnaires, working groups or semi-structured interviews as data collection tools. There were two exceptions to this approach, (van der Leeuw *et al.*, 2016, Huwendiek *et al.*, 2010), who used web-based evaluation questionnaires with 422 and 860 respondents respectively. Participants in these studies were based in a wide variety of healthcare settings and in different countries.

As with the research papers included in other areas of this literature review, there was little to no information provided about the undergraduate programme or healthcare setting with which participants in each study were associated. No breakdowns of the participants by experience, position or demographics were provided. Although there were no major differences in findings between these larger studies and the other sixteen smaller studies, it is not possible to infer a degree of commonality between clinical teachers' perceptions of their role, as it is difficult to assess the degree of homogeneity or heterogeneity of the participants in each study from the information provided. This makes it difficult to examine how the clinical teacher role applies in different contexts at a more detailed level.

2.3 Experience of clinical teachers

It proved difficult from the literature to find out how clinical teachers of undergraduate medical students experience their role. Only eleven research papers were identified for inclusion in this review, published between 2002 and 2017. A summary of these papers can be found in Appendix 2 – Summary of literature pertaining to the experiences of CTs, research papers E1 – E11. Three main themes emerged from the data:

- Roles in the teaching encounter (of teachers themselves, patients and students)
- Challenges and rewards
- Situational factors (including organisational, environmental and teaching factors).

These themes are presented in Figure 10 overleaf.

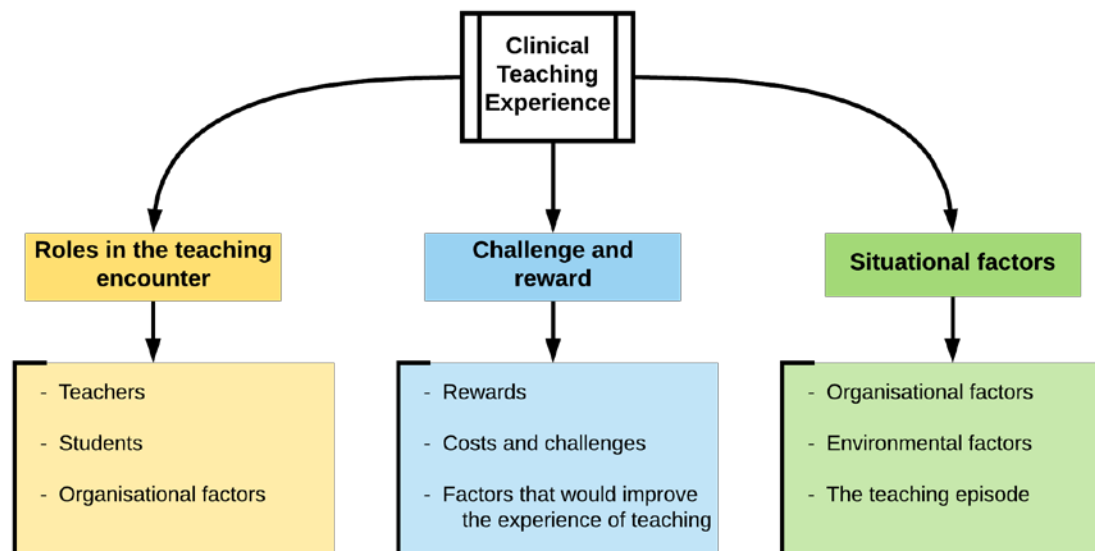


Figure 10 - Themes and sub-themes related to the findings of the research studies critiqued regarding the experience of clinical teachers

Only two of those research studies had large cohorts where participants were not restricted to a single healthcare or educational organisation; Norman and Dogra (2014) conducted an electronic survey of 518 clinical teachers in the UK, and Lawson (2007) undertook an extensive research project with 3547 clinical teachers in Australia. Survey data alone may not be well-suited to exploratory work due to the difficulty in analysing large quantities of data (Robson and McCartan, 2016), and for topics such as the ‘experiences of clinical teachers’, surveys are less appropriate than in-depth methods such as interviews. Lawson (2007) sought to overcome this by using a wide variety of research methods. Surveys and case studies were used in the early stages of the research to generate broad themes, and those themes explored in more depth with participants using methods such as focus groups and interviews. Each of the remaining nine papers were confined to a single setting (either healthcare or educational) with sample sizes of between 5 and 249 participants (see Appendix 2 – Summary of literature pertaining to the experiences of CTs, papers E1-E2, E4 – E7 and E9 – E11).

The research papers exploring the experience of clinical teachers identified in this section of the literature review were consistent with those in the other sections in that they all contained very limited information regarding their participants or context. They did not offer a description of the undergraduate medical programme with which the clinical teacher participants were associated, an account of the roles and responsibilities of those clinical teachers or an account of their prior

preparation and training. It is therefore difficult to make meaningful comparisons of the research findings with other settings as there is no way of ascertaining whether like situations are being compared. Within the two larger studies (Norman and Dogra, 2014 and Lawson, 2007) there was no breakdown of research findings by setting, so there is no opportunity for comparisons to be made here.

Despite the limited number of research papers and the scant contextual information contained within them, there were some potentially worrying similarities in their findings. Although clinical teachers were reported to enjoy teaching, participants reported experiencing challenging organisational obstacles to that teaching. Every paper indicated some degree of frustration regarding the insufficient time available for teaching, which ranged from lack of protected time for teaching, preparation for teaching being done outside working hours and having too much teaching to do in a very limited timeframe. Communication between clinical teachers, their health care employer and the university offering the undergraduate medical programme was often limited or unclear. Participants cited a lack of information about what was expected of them, uncertainty about who held overall responsibility for the students' learning, lack of guidance about the educational programme and unwillingness to acknowledge the concerns and suggestions of clinical teachers as being particularly problematic (Hendry *et al.*, 2005, Lawson, 2007, Arena *et al.*, 2008). There were also issues surrounding the perceived 'lower status' of undergraduate teaching compared to postgraduate teaching (Norman and Dogra, 2014), clinical or research work (Peadon *et al.*, 2010, Busari *et al.*, 2002), and feelings of isolation from other teachers (Lawson, 2007, Reck *et al.*, 2006).

The concept of negativity bias was posited by Rozin and Royzman (2001), who suggested that research participants may give greater weight to negative entities than positive entities. However, Corns (2018, p. 608) rejected the assumption that bad is necessarily 'stronger' than good, suggesting instead that researchers should tease apart the representations of 'good', 'bad' or 'strong' to generate potentially contradictory hypotheses that may be tested. Accordingly, although the number of negative statements about the experience of clinical teaching vastly outnumbered the perceived rewards in the research papers E1 – E11, no judgement can be made on the overall positivity or negativity of the experience without creating a testable hypothesis. However, there is clear evidence of scope for positive changes to be made in order to improve the experience of clinical teachers.

2.4 Identity

The way that a teacher perceives their teaching identity can influence how they experience the teaching role (Zembylas, 2003). It was therefore important that the research literature concerning the concept of teacher identity was critiqued in order to offer a context for teaching experiences.

The literature search in relation to studies regarding identity was particularly challenging. While there were many sources available that discussed teacher identity, they were almost exclusively focussed on participants who were solely teachers. The identity of a person who purely teaches is different from that of someone who has a combined teaching and clinical role. Clinical teachers are healthcare professionals before they are teachers and are therefore adapting their own sense of identity to incorporate the 'teacher' role into an existing 'clinical' role, rather than transforming from a student teacher into a teacher (van Lankveld *et al.*, 2016). In the field of medical education, most of the identified research comprised of either literature reviews or opinion pieces rather than primary research.

The search was therefore broadened to include literature relating to nursing and other health professionals, and fifteen research studies, conducted between 2002 and 2018 which focussed on the sense of identity of clinical teachers were identified. A summary of these studies (including methods and methodology, key findings and theme) is presented in Appendix 3 – Summary of literature review pertaining to identity, research papers Id1 – Id15. From these fifteen sources, six themes emerged (see Figure 11 overleaf).

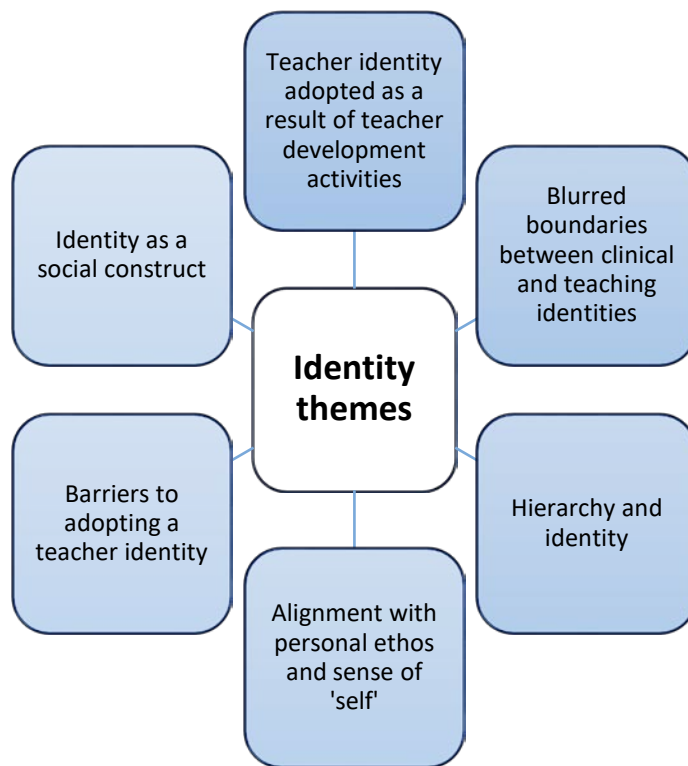


Figure 11 - Identity themes emerging from the literature review

2.4.1 Identity as a social construct

In the book *Social Identity*, Jenkins (2014) highlighted the concept of clinical teacher identity being primarily a social construct where an individual develops their own sense of identity individually, and by interaction with other people and institutions. Cantillon *et al.* (2016) explored this concept further, when they proposed a useful model of the community of practice (CoP) experienced by clinical teachers. This was a constructivist interpretivist study where 16 clinical teachers in a single hospital in Ireland were interviewed to explore their perceptions of how clinicians become teachers. They discovered a high degree of congruence as to how participants in their study described their teaching practice and identity, despite the sample being purposively selected to ensure no two participants shared the same developmental or training pathway to become a clinical teacher. As such, they sought to apply the *communities of practice* lens proposed by Wenger (1998) to explain this congruence between diverse participants who all shared the same workplace community. The benefit of applying a model such as this is that it can allow the reader to easily move and translate ideas from one setting to another (Czarniawska and Joerges, 1995). This literature supported the proposal that clinical teachers' teaching identity is intrinsically linked with and shaped by their CoP; this may include influences exerted by their colleagues, students, workplace organisational

structures, management strategies and the culture of the university with which they are associated. This is particularly valuable in the field of medical education, as there may be wide variations between:

- Different research studies in terms of the characteristics of the clinical teacher role
- The educational philosophy of the MBBS programme
- The professional or educational backgrounds of the clinical teachers
- The nature of development activities available
- How the local health care system is organised.

Wenger (1998) considered that a CoP could be defined as comprising of three dimensions, with five functions (Wenger, 2002). These dimensions and functions are illustrated in Figure 12 (overleaf).

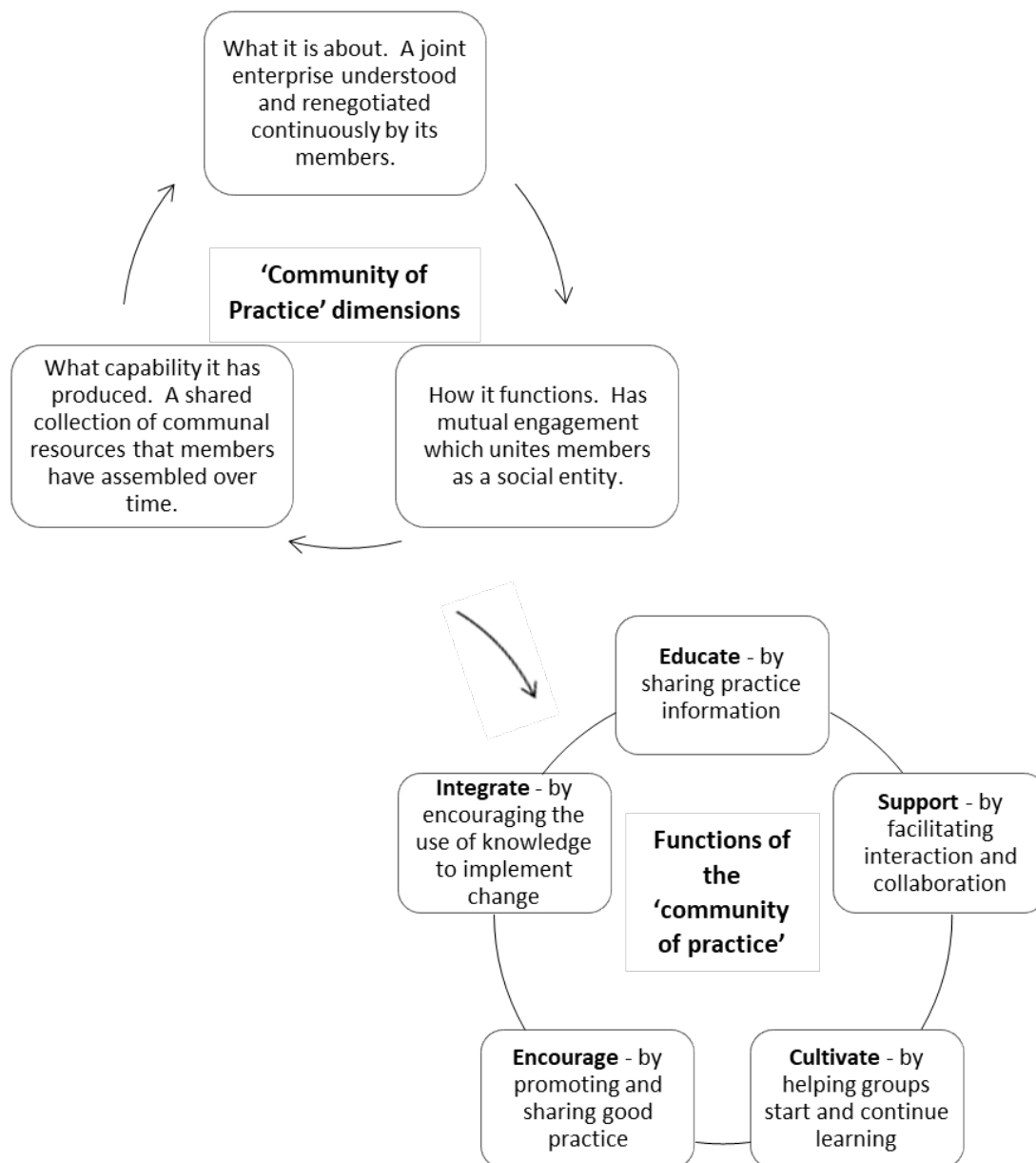


Figure 12 - 'Community of Practice' dimensions (adapted from Wenger, 1998 and Wenger, 2002).

Cantillon *et al.* (2016) conducted a constructivist interpretivist study in a teaching hospital adjacent to a medical school in Ireland where they interviewed fourteen participants. This project sought to investigate how clinicians became teachers. The research had some limitations, as the small sample size and single university involved in the study mean that the results may not be transferrable to other populations. There was also very limited information regarding the participants (their specialty, length of teaching career and specific teaching roles or content were not included in the research paper), which further limits a readers' ability to apply the results to their own population or setting. However, the findings of this research do offer a pertinent perspective on the relationship between the CoP and clinical teacher identity formation. Within the CoP of clinical teachers,

Cantillon *et al.* (2016) outlined two planes; these were a horizontal plane representing professional accountability, and a vertical plane representing institutional management. On the horizontal plane, clinical teams (termed '*firms*') and communities of junior doctors (termed '*fraternities*') were dominant. Firms were the established clinical teams with a clear hierarchy. To become part of the firm, new arrivals sought to legitimise their participation by aligning themselves with the established systems of proficiency. In this system, norms were not challenged by newcomers, whose legitimacy as teachers was dependent on their degree of alignment with the firm. In contrast, fraternities were less hierarchical, and situated between and outside the participants' clinical firms. The prime role of the fraternity was to support members to orientate themselves to the prevailing proficiency systems of the firms in order to gain credibility.

The vertical (managerial) plane described by Cantillon *et al.* (2016) comprised of healthcare institutions (hospitals and clinics) and the medical school. When working in institutions where teaching was perceived as valued (symbolised by setting time aside for teaching and embedding teaching activity within the promotions process) clinical teachers developed strong teaching identities. Conversely, in institutions which did not value teaching activity (characterised by not setting aside sufficient time or resource to teach, and where perceived value was based on patient throughput) teaching identities were undermined. In both cases, participants had to negotiate (and renegotiate with every job change) their teaching identity in relation to the objectives and policies of their employing institution. The vertical plane relationship with the medical school was portrayed by participants as being primarily one of powerlessness. Changes were imposed on teachers from senior educational managers, and sometimes created conflict between how a teacher thought they should teach, and how they were forced to teach due to student volume. Some participants with strong teaching identities resisted accountability to the medical school in order to deliver teaching without compromising their teaching values (which was also noted by Eteläpelto *et al.*, 2014). Teachers with a less developed teaching identity were more likely to alter their teaching practice to suit the workplace, an observation also reported by Pratt *et al.* (2006) who undertook a six-year qualitative research project to explore the identity formation of medical residents in the USA. Accountability to the medical school was also typified by a universal perception of learners having increased power and being more assertive with their expectations.

In summary, in order to develop a strong teaching identity based on social constructs, the literature identified that clinical teachers need to work in:

- A clinical *firm* with clear competence structures and encouraging superiors.
- A supportive *fraternity* of junior staff at varying grades.
- A healthcare institution which explicitly values teaching activity.

- A medical school which meaningfully involves clinical teachers in the decision-making process, supports their teaching values and mediates 'difficult' student relationships.

2.4.2 Teacher identity adopted as a result of teacher development activities

Another recurrent theme from the literature was that the development of a perceived 'teacher identity' could be enhanced and facilitated by engaging in teacher development activities. Riveros-Perez and Rodriguez-Diaz (2018) conducted a phenomenographic analysis of interviews with 12 clinical teachers from three medical schools in Colombia to explore their perceptions of how clinical staff develop a teacher identity. The limitations of this study were that the cohort was quite small, and there was limited information given about the specific nature of the Colombian undergraduate medical programmes, the teachers and their precise role. This makes it difficult to apply the results to other clinical teachers and programmes, as the start and end-points between which the identity development occurred is uncertain. However, the paper was included as it did provide a valuable insight into the development of a teacher identity by clinical staff, a subject for which there was a paucity of literature. The nature of a phenomenographic methodology is to determine the different categories of perceptions of a phenomenon by different people and resulted in the proposal of a four-step taxonomy to describe the journey from clinician to undergraduate clinical teacher (see Figure 13).

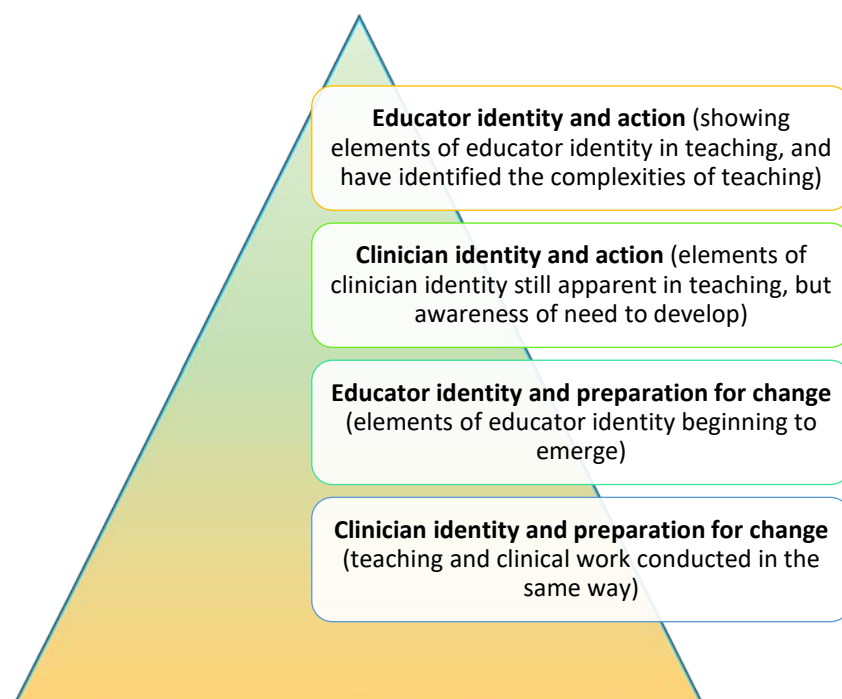


Figure 13 - The journey from clinician to teacher (adapted from Riveros-Perez and Rodriguez-Diaz, 2018)

In order to ascend to the highest level of this taxonomy (educator identity and action), a clinical teacher had to have recognised that teaching and clinical work are different – and the same approach cannot be used for both roles. It was only by recognising the complexities of teaching and understanding educational pedagogy that a teacher identity could be fully adopted (Riveros-Perez and Rodriguez-Diaz, 2018). It could therefore be postulated that this research supports the need for specific development opportunities for teaching rather than clinical skills to be available to clinical teachers, as this very specific knowledge would be very difficult to acquire from networking and observation alone. This perspective aligns closely with the results of a structured literature review undertaken by Molodysky *et al.* (2006) who determined that although doctors are rarely taught how to teach, such training is necessary in order for them to develop as effective clinical teachers.

Van Lankveld *et al.* (2016) conducted an interpretivist study where 17 early-career medical teachers associated with a single Dutch medical school were interviewed to gain their perspectives on the process of adopting a teaching identity. The researchers postulated that staff development activities could afford new clinical teachers their own supportive community, although they recognised that such communities had limited permanence due to the changing nature of job and training roles inherent within a medical career. While this research provided a valuable insight into the early stages of teacher identity adoption by new clinical teachers, the applicability of the findings to all new clinical teachers is potentially limited by the cohort characteristics; all participants to this study were recruited by virtue of their enthusiastic engagement with a clinical teacher staff development programme. It is therefore unclear whether staff development activities may be beneficial to all clinical teachers or whether the proactive attitude of these individual clinical teachers might have influenced the findings.

Sethi *et al.* (2018) conducted a grounded theory research project where 27 graduates from one post-graduate medical education programme in the UK were interviewed to explore their perceptions of the impact of educational qualifications on teacher identity development. In a similar way to the research of van Lankveld *et al.* (2016), the findings of this study cannot be applied to the general population of clinical teachers, as this cohort had already demonstrated a predilection to formal post-graduate qualifications. As might be expected, the participants reported that a post-graduate medical education programme had an impact on clinical teacher identity in relation to their development as a teacher, learner, researcher and leader. However, it is interesting to note that participants in this study also stated that they had developed as mentors, which has been recognised as a stimulus for overall career satisfaction and promotion but was not a specific learning outcome of their educational programme (Sambunjak *et al.*, 2006).

2.4.3 Blurred boundaries between clinical and teaching identities

Within clinical teaching, neither the clinician nor teacher identity exist in isolation. Even where a clear split role is in place, an urgent clinical call can come when a teacher is teaching, or an interesting opportunity for teaching can arise during a clinical session. The boundaries between the teaching and clinical roles are therefore similarly overlapping and blurred (Steinert *et al.*, 2017). There may be times where teaching and clinical responsibilities are in conflict with one another, and as Prideaux *et al.* (2000) recognised, there has been mounting pressure for clinicians to spend less time teaching and more time on clinical duties in recent years. They recommended that as teaching and clinical identities become more interrelated, the quality of teaching may be considered more important than the quantity. They also postulated that clinical teachers required development in terms of management skills in order for them to find ways of demonstrating and explaining good teaching practice to students.

These teacher / clinician boundaries can be further blurred by the lack of clear and universally understood clinical teacher roles and responsibilities (Sabel *et al.*, 2014, Bartle and Thistlethwaite, 2014). There are clearly barriers to a clinician adopting an authentic teacher identity if they are unsure what the teacher role is.

2.4.4 Hierarchy, credibility and identity

The impact of status and hierarchy on the development of a teacher identity was highlighted by a number of sources (van Lankveld *et al.*, 2016, Sabel *et al.*, 2014, Bartle and Thistlethwaite, 2014, Cahan *et al.*, 2011, Lown *et al.*, 2009, Starr *et al.*, 2003). In the study conducted by van Lankveld *et al.* (2016), four of the participants adopted a meta-position where they attempted to distance themselves from those who thought that doctors were important, and instead elected to confer higher status on teaching, research and patient contact activities. A meta position is considered to occur when an individual removes themselves from a specific identity position and attempts to observe the nature of this identity objectively from the outside. This is a term that was described by Hermans and Hermans-Konopka (2010). In this instance, the value of adopting a meta position was that clinical teachers were able to gain a reflective overview of teaching and clinical identities and their interactions to enable 'bridges of meaning' to emerge (Hermans and Hermans-Konopka, 2010). This position could therefore be argued to be an effective way to integrate the teacher and clinical identities for individual clinical teachers, as it allows for the integration of personal reflection, values and role-specific factors to be considered.

Issues of hierarchy are present in the way that clinical teachers see themselves, and in the way that they are perceived by others. Traditionally, medicine had been viewed as having a higher social status than teaching, so there is a potential disincentive for medically trained doctors to 'step down' into a teaching role, and adopt a teaching identity rather than that of a clinician (van Rossum, 2013, Benor, 2000).

2.4.5 Alignment to personal ethos and sense of 'self'

The held self-identity of participants, and the alignment of a teaching role with their personal ethos and values was discussed by three research studies. Hu *et al.* (2015) undertook a qualitative study to explore academic careers in medical education. They conducted interviews with forty-four lead and early career clinical teachers from twenty-one Australian and New Zealand medical schools and reported that teacher identity was not *developed* as such, but revealed. They went on to state that '*most [participants] having begun their careers in other disciplines, recounted a gradual realisation that education was their calling*' (Hu *et al.*, 2015, p.1130). This research was valuable, as it was wide ranging in terms of geographical area, with only twice as many participants as universities. However, the nature of the participants was not presented in detail in the report, and there was no information about the medical programmes or the institutions involved, or the breakdown of how many participants were involved from each of those institutions. This makes comparison between the results of the study and other research difficult, as it is not possible to determine if parallels can be drawn.

Stone *et al.* (2002) conducted interviews with ten physician clinical teacher participants associated with five medical schools in the USA to explore how clinical teachers perceived their teaching identity. They found that clinical teachers had an '*underlying humanitariansim*' (Stone *et al.*, 2002, p.182) which was expressed by how they discussed their students. A potential limitation of the research was that there was an emphasis on only recruiting participants recognised as excellent teachers by their programme director, and awarded special recognition for that role. It is therefore unclear whether the identified underlying humanitarianism may be present in less than excellent teachers, or if that humanitarianism was a contributing factor to their teaching excellence.

Starr *et al.*, (2003) conducted a systematic content analysis of focus groups conducted with thirty-five experienced community physician clinical teachers in the USA. The results of this study corresponded with those of Stone *et al.* (2002), as they also noted that clinical teachers placed value on students' development and achievement in a humanitarian way. This student development and achievement were noted as key factors in the intrinsic satisfaction gained from the clinical teacher

role, and went some way to mitigate the perceived lack of external reward for teaching. This research report presented relatively detailed information regarding focus group participants, but less about the nature and organisation of the medical programmes they were teaching, which limits the transferability of the results.

2.4.6 Barriers to adopting a teacher identity

Barriers to the adoption of a teacher identity by clinical teachers were described by three research studies (van Lankveld *et al.*, 2016, Sabel *et al.*, 2014, Bartle and Thistlethwaite, 2014).

Van Lankveld *et al.* (2016) conducted an interpretivist epistemological study to explore how new teachers integrated the teaching role into their identity. Interviews were conducted with seventeen early-career medical teachers affiliated with a Dutch medical school. A particular strength of this research was that it utilised a longitudinal data collection, where two interviews were undertaken with each participant, and a reflective logbook was maintained by participants over a seven-month period.

Sabel *et al.* (2014) undertook a phenomenological analysis of nine focus groups (34 participants) with early career medical teachers and six interviews with senior medical educators in the UK to explore challenges to teaching identity construction. The medical teachers in this study were not exclusively clinical teachers, as some participants were scientists rather than doctors. Although attempts were made by the researchers to keep those groups in separate focus groups (recognising that the issues raised were likely to be different), this was not always possible and some focus groups were mixed. It is unclear how this may have influenced the results in this case, although participants were united in the belief that teaching was clearly a secondary role in comparison to their position as a scientist or clinician.

Bartle and Thistlethwaite (2014) carried out a study based on socio-cognitive career theory to explore the motivation, socialisation and navigation of assuming the identity of a clinical teacher. Interviews were conducted with twelve teaching fellow participants (out of a potential pool of thirty-two) in Australia. Particular difficulties encountered and recognised by the authors of this study were that some participants were unavailable for follow-up interviews leading to an incomplete data set, and two of the participants completed their teaching post three years previously, so the data for these participants was retrospective in nature. An additional complication in this case was the possibility of compromising the anonymity of participants due to the small potential pool, so as a result the information about participants was deliberately scant. For the reader, this prevents comparison with other educational institutions or populations.

When combined, these three studies outline six key recommendations to facilitate the adoption / integration of a teacher identity (see Figure 14).

Barrier	Proposed solution	Source
Lack of positive narratives on teaching	Medical schools should create the opportunity for early-career teachers to share their positive stories about teaching, and to engage with positive role models. Identity coaching programmes have also been shown to facilitate the adoption of new identity positions (Kalliola and Mahlakaarto, 2011).	van Lankveld (2016)
Lack of established teaching history and culture	For the teaching identity to become more visible, it is important that there are traditions, activities and events in which the role of the teacher is central, visible and celebrated.	van Lankveld (2016)
Lack of community of teachers	This can be addressed at a local level by facilitating networking opportunities whereby clinical teachers can find a connection to others and gain a sense of recognition of their achievements to make them feel valued. More widely, formal associations for medical teachers have a role in facilitating enduring relationships where job roles / locales change (Dewey <i>et al.</i> , 2005, Cooke <i>et al.</i> , 2003).	van Lankveld (2016)
Lack of reward and promotion structures	To feel valued, it is important that there are reward and promotion structures to formally acknowledge achievement and excellence. Despite repeated suggestions to reward teaching activities, this is still an area that requires further work by medical schools and employers (Christakis, 1995).	van Lankveld (2016) Sabel <i>et al.</i> (2014)

Lack of clarity of the roles and responsibilities of the clinical teacher, and general nomenclature	<p>If there is little agreement or understanding of the roles and responsibilities of the clinical teacher, it can be very difficult for an individual to identify as clinical teacher.</p> <p>This frustration was articulated by participants in two of the three studies and extended to the nomenclature of language that surrounded clinical education (for example, are teachers, educators, preceptors, supervisors and mentors the same thing?). This can be a great source of confusion to new clinical teachers.</p>	<p>Bartle and Thistlethwaite (2014)</p> <p>Sabel <i>et al.</i> (2014)</p>
Lack of clarity regarding future career paths in education	<p>Clinical career paths were not clear to participants in two of the three studies. This resulted in a tension between the teacher and clinician identities, as there was a sense of ‘why bother developing as a teacher if I can’t take this interest forward into my career’.</p>	<p>Bartle and Thistlethwaite (2014)</p> <p>Sabel <i>et al.</i> (2014)</p>

Figure 14 - Barriers to the adoption of a teacher identity in clinical teachers (adapted from van Lankveld, 2016, Bartle and Thistlethwaite, 2014 and Sabel et al., 2014)

2.4.7 Summary of identity themes

The fifteen research papers that focussed on the identity of clinicians as clinical teachers were analysed, and the key concepts of each were noted. Those concepts are presented opposite in Figure 15. Major or repeated themes are represented by the seven rectangular coloured boxes. Three cross-theme principles (which apply to more than one of those major themes) are presented in the purple diamonds.

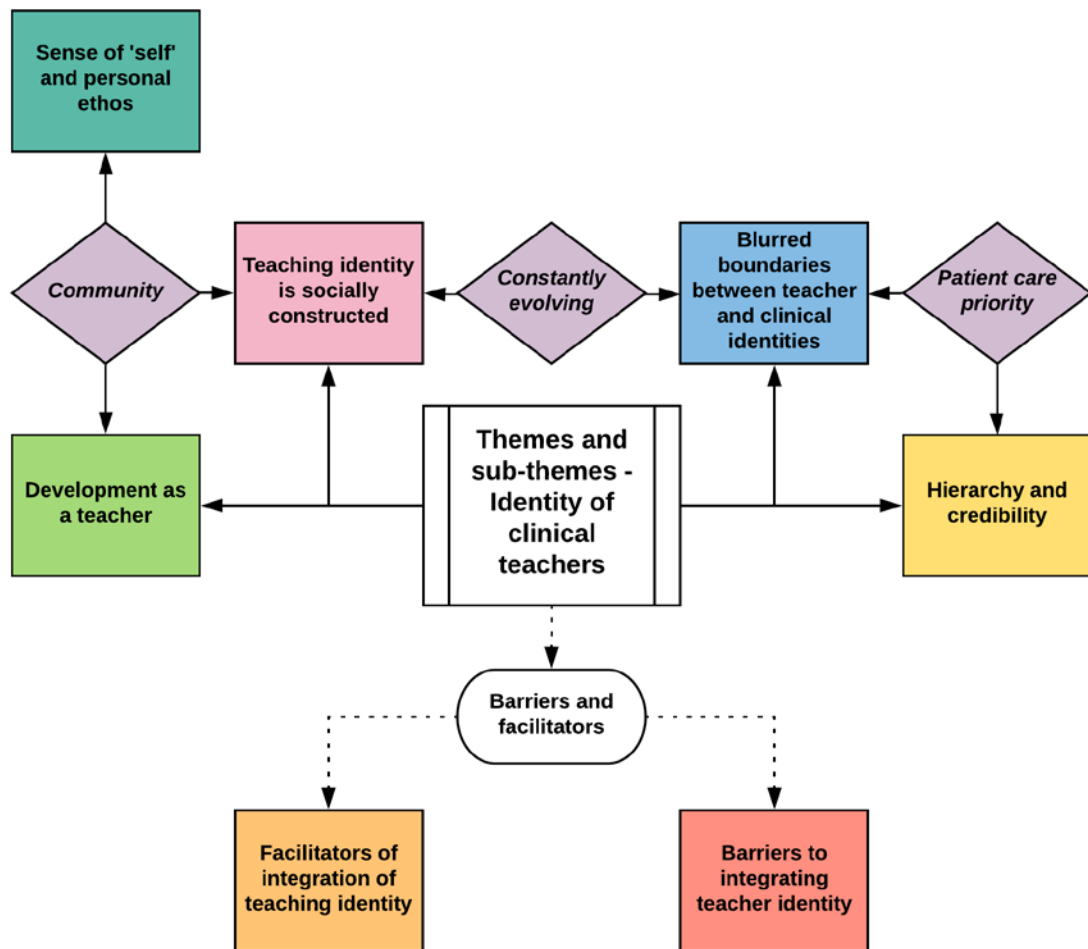


Figure 15 - Themes and sub-themes depicted in the literature regarding the identity of clinical teachers

In addition to the seven major or repeated themes that were identified, three additional ‘cross theme’ principles were noted:

- **Teaching communities** are both socially constructed and influential in the development of teaching skills and ‘sense of belonging’.
- Teaching identity is **constantly evolving** in response to social and political landscape, and the nature of the teaching role (and how well defined that role is).
- Whatever the nature of the teaching role or the hierarchical status of the teacher, **patient care always has priority** over teaching.

Clinical teachers usually start their career as health professionals and integrate the teaching role later (to a greater or lesser extent). At the beginning of their teaching career, clinical teachers may see

themselves as clinicians first, and teachers second (van Lankveld *et al.*, 2016). As such, it is important that new clinical teachers are well-supported in their teaching role in terms of staff development, and work within an organisation that regards clinical and teaching roles with equal parity of esteem (Peadon *et al.*, 2010). Only by working within such an organisation can they fulfil the potential of the teaching role and develop a strong identity as a teacher (Beauchamp and Thomas, 2009).

In summary, it is evident from the literature that the development and expression of teaching identity is both complex and highly specific to both the individual teacher, the nature of their teaching role, the healthcare and educational institutions with which they are associated and the wider teaching community. This model has been used in the discussion to provide a conceptual and contextual framework for analysis of the findings of this research in relation to identity.

2.5 Preparation and support of clinical teachers

As previously outlined in the introduction to this report, the preparation and support of clinical teachers is variable and largely unspecified by the GMC as a regulatory body. Each UK University delivers its undergraduate medical programme in a different way, influenced primarily by whether an outcomes-based, problem-based, case-based, integrated or traditional curriculum has been adopted (Wood, 2008). As each of these curricula place emphasis on different aspects of the broad clinical teacher role, staff development and support offered by the university to clinical teachers involved in the clinical training of its' students also varies.

Although the guidance from regulatory and professional bodies is broad in focus, and lacking in specific recommendations for the content, duration, delivery modality and assessment of staff development aimed at preparing clinical teachers for their role, there is a body of evidence which explores clinical teacher perspectives of their own developmental needs. It is this literature that forms the basis of this literature review. Eighteen research papers were identified for inclusion, dated between 2003 and 2016. See Appendix 4 – Summary of literature pertaining to preparation and support of CTs, research papers (PS1 – PS18) for a full summary of each paper.

The limitations and potential methodological issues pertaining to these research studies are very similar in nature, so are presented as a single critique to frame the findings appropriately. All the studies gathered data using either interviews (with small cohorts of between 6 - 28 participants) or by written survey. Although the numbers of survey participants were larger (up to 128 participants), these studies were limited in their ability to gather inductive data from participants, as there was no opportunity for the researchers to ask probing questions or seek explanations for vague free-text

answers. The one exception was the research conducted by Swanwick *et al.* (2010), where survey data were followed up with two focus groups involving a total of 23 participants to explore the themes further. However, the 23 focus group participants represented sixteen NHS Trusts, so there were only 1-2 representatives from each trust at the focus group, and thus the perspectives gathered are very limited.

A further difficulty encountered when reviewing the literature was that there was limited information regarding the nature of the undergraduate medical programme or the NHS departments where the participants worked in relation to the ethos and nature of the teaching delivered. It was not possible to determine whether the research related to a PBL curriculum or a case-based curriculum for example, yet the teaching demands of each are quite different. It was also not possible to 'compare and contrast' different types of clinical teacher role within a single paper, as each research project was limited to a single population (either a single NHS trust, or several trusts supporting a single undergraduate programme). It was therefore difficult to determine from the literature what the precise development requirements for clinical teachers might have been for a specific type of medical curriculum, and only possible to take a broad view of clinical teaching more generally. This is a distinct problem, as it could be argued that a curriculum with a large PBL element requires teachers with good facilitation skills, but a more traditional curriculum might place more emphasis on large group teaching skills for example.

Taking into account these limitations, the development programme requirements for general clinical teachers presented in the eighteen research papers reviewed is summarised in Figure 16, presented overleaf.

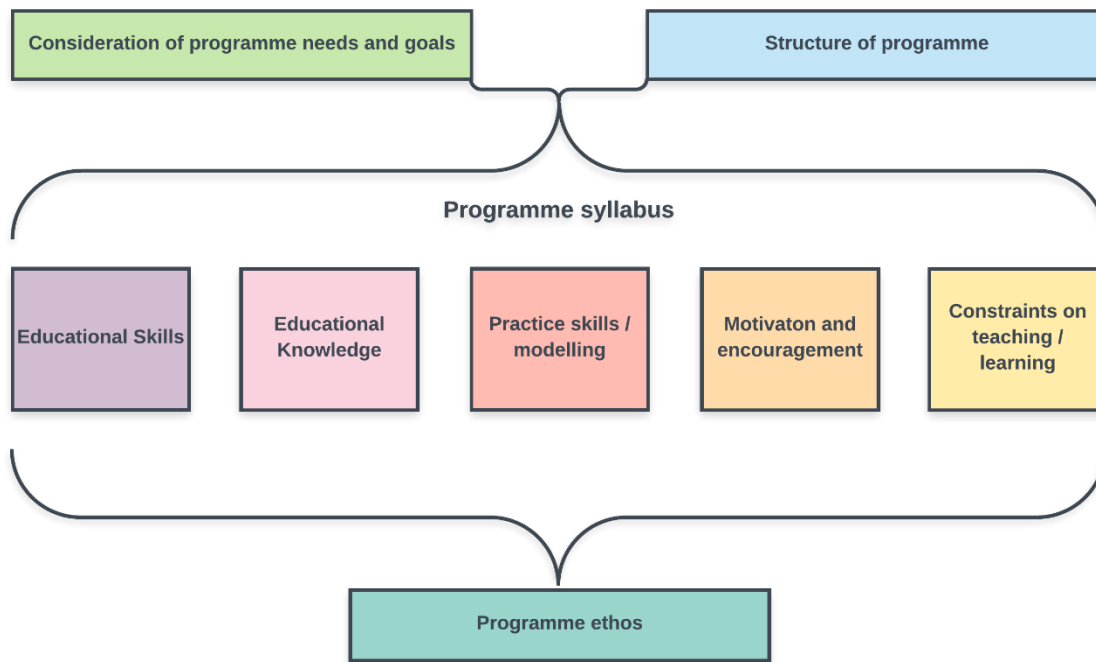


Figure 16 - Summary of the findings of the research studies critiqued regarding requirements of a clinical teacher staff development programme

Four main themes relating to clinical teacher development were identified from the literature, and were explored in sections 2.5.1. – 2.5.4. Those sections were:

- Considerations to be made in advance of any development programme
- The appropriate structure for such a programme
- Requirements for programme syllabus
- The overriding ethos that should underpin any development programme

2.5.1 Prior considerations for clinical teacher development programmes

In order that a staff development programme can adequately meet the needs of clinical teachers, it is first necessary to determine what those needs are. Montero *et al.* (2012) conducted semi-structured interviews with seven medical faculty members to identify potential barriers to development of clinical teachers. A grounded theory approach was adopted, and data analysed using open, axial and selective coding. The researchers concluded that a main barrier to clinical teachers engaging in staff development programmes was the lack of consensus on what it meant to be a 'good' clinical teacher, and the personal characteristics that the 'good' teacher exhibited. Without knowing what they were aiming for, or what was expected of them in order to demonstrate excellence, clinical teachers were not motivated to engage in formal staff development activities. This was echoed in the research previously undertaken by Ahmady (2009), who listed identifying

teacher and institutional goals and needs as the first four steps in a seven-step faculty development model. The last three steps focussed on selecting which needs and goals to address, and how best to deliver them; the actual teaching delivery was the last consideration, as the priority was on the content being appropriately targeted and defined. In addition to the content being clearly defined at the outset, there was also very clear direction from the literature that development programmes should be broadly applicable to all specialty groups, including other health professionals involved in medical teaching (Searle *et al.*, 2006, Swanwick, 2010, Srinivasan *et al.*, 2007). However, it was also recognised that there needed to be the concurrent facility for clinical teachers to tailor any programme to their own needs and goals (Pololi *et al.*, 2003, Akerlind, 2007, Cook, 2009).

Another prior consideration for teacher development programmes was related to the importance of institutional support for a particular development programme, and the perceived respect for that programme (Zibrowski *et al.*, 2008, Swanwick, 2010). Without this support and recognition, clinical teachers were unlikely to feel that the programme was of value to them, and therefore be less inclined to attend.

2.5.2 Structure of the clinical teacher development programme

There was little consensus in the literature regarding the optimal structure for staff development programmes for clinical teachers. Full and half study days were popular with different teachers, as were distance and face-to-face delivery modalities (Montero *et al.*, 2012, Searle *et al.*, 2006, Srinivasan *et al.*, 2007). No overall agreement or pattern could be determined from the available literature, as the 'ideal' programme structure varied according to role, time available for study (and whether this was protected), geographical location and personal preference.

There was a clearer steer in relation to the structure of individual taught sessions within a programme. The literature indicated that there should be plentiful opportunities for practical participatory activities, have sufficient opportunities to observe and reflect and a procedural focus should be adopted (MacDougall and Drummond, 2005, Armstrong *et al.*, 2003, Harris *et al.*, 2007).

2.5.3 Syllabus of the clinical teacher development programme

The literature presented extensive recommendations from clinical teachers regarding their preferred syllabus for teacher development programmes, but all recommendations were able to be

represented by five broad themes (for full breakdown, see Appendix 4 – Summary of literature pertaining to preparation and support of CTs):

1. **Educational skills** (Cook, 2009, MacDougall and Drummond, 2005, Weurlander and Stenfors-Hayes, 2008, Harris *et al.*, 2007, Searle *et al.*, 2006, Bigbee *et al.*, 2016, Akerlind, 2007). These skills are the practical, day to day teaching skills and strategies that teachers use when planning and delivering learning materials. The theory and literature pertaining to these strategies were not regarded as important, more the indications and uses of each strategy. This category included giving feedback, facilitating small and large group sessions, organising learning and clinical teaching.
2. **Educational knowledge** (Weurlander and Stenfors-Hayes, 2008, Harris *et al.*, 2007, Hatem *et al.*, 2006, Pololi *et al.*, 2003, Searle *et al.*, 2006, Bigbee *et al.*, 2016, Akerlind, 2007, McLeod *et al.*, 2006). Although similar to educational skills, this category was perceived as having an important knowledge base that teachers should be aware of to inform their practice. This included areas such as assessment, equality and diversity issues, curriculum development and the wider literature around educational theory.
3. **Practice skills and modelling** (Cook, 2009, MacDougall and Drummond, 2005, Swanwick, 2010, Harris *et al.*, 2007, Searle *et al.*, 2006, Bigbee *et al.*, 2016, Dahlgren *et al.*, 2006, Akerlind, 2007). This category included the practical teaching skills that teachers wanted to practice in a 'safe' environment and were generally viewed as high-stakes or high-stress activities. Simulation and role play were useful activities, and the desired structure was 'see one, do one'. This category included aspects of pastoral support, group facilitation skills, educational supervision and aspects of teamworking.
4. **Motivation and encouragement** (MacDougall and Drummond, 2005, Zibrowski *et al.*, 2008, Pololi *et al.*, 2003, Bigbee *et al.*, 2016, Gallagher and Newman, 2011). This category covered aspects that may motivate clinical teachers or assist in their career development as educators. It included both practical skills and formal processes and was aspirational in nature. Although perhaps not directly relevant to the early-career teacher or teaching fellow, the view of clinical teachers was that it was important to showcase this information to motivate those teachers to continue in

their role. Examples of elements included within this category were educational scholarship and research, career planning, professional networking, personal development and accreditation processes for the recognition of teachers.

5. **Constraints on teaching and learning** (MacDougall and Drummond, 2005). In addition to providing motivating factors, teachers also thought that staff development should also cover the challenges associated with teaching alongside practical strategies to manage them. Again, this was largely to pre-empt problems that teachers may encounter and help them form realistic expectations of the clinical teacher role. This category included elements such as managing challenging situations, teaching when time is limited and ensuring an appropriate work-life balance.

2.5.4 Ethos of the clinical teacher development programme

The overall ethos of staff development programmes for clinical teachers was outlined by many of the research papers (Ahmady, 2009, Armstrong *et al.*, 2003, Swanwick, 2010, Zibrowski *et al.* 2008, Srinivasan *et al.*, 2007, Dahlgren *et al.*, 2006, Gallagher and Newman, 2011). The concept of ethos was largely focussed around issues of institutional support and regard for teachers, characterised by reference to the importance of formal accreditation and reward structures which was proposed by all literature sources. There was consensus that motivation of clinical teachers should be the main aim of any staff development programme, and support for the idea that any programme should be based on content which is generic enough to be applicable to any teacher of undergraduate medical students regardless of their clinical qualifications or background (Swanwick, 2010, Searle *et al.*, 2006, Srinivasan *et al.*, 2007). A staff development programme should also enable clinical teachers to demonstrate the impact of the programme on their professional practice and therefore evidence a return on investment of time, resources and effort that the programme has required (Swanwick, 2010). Finally, the programme should seek to support a network of clinical teachers extending beyond the geographical, professional and institutional boundaries of teachers to offer support and continued development opportunities after the course has been completed (Pololi *et al.*, 2003, Searle *et al.*, 2006).

2.6 Summary of literature review

Although identity, experiences and development of clinical teachers of undergraduate medical students had been studied previously, these elements had not been combined to examine the role within a single institution; this is the gap that this research addresses. The literature indicated that there was a degree of overlap and interplay between these three elements, and this research explores how they might impact on one another in individuals teaching a single rotation within a single programme at the same institution (where differences in organisation and students are therefore minimised as far as possible). It will also consider the relationships between experience and support, and professional background and identity.

3 Chapter 3 – Methodology, design and methods

3.1 Introduction

The preceding chapter outlined the existing literature base relevant to the research questions. This chapter presents and discusses the methodology, design and methods used in this study and outlines the research aims and questions, theoretical perspectives and ontological and epistemological assumptions made. The research design is presented, including the sampling strategy, inclusion and exclusion criteria and data collection methods. Data analysis strategies are defined, and the chapter concludes with ethical considerations, and trustworthiness and rigour of the research.

3.1.1 Research aim and questions

The aim of this research was to investigate how clinical teachers experienced their role within the foundations of clinical practice (FoCP) rotation of an undergraduate medical degree offered by a University in the North of England. The intention of this study was to:

- Inform current and potential clinical teachers about the role and the potential benefits and challenges faced by other teachers, and to see how those teachers have integrated teaching into their clinical career.
- Afford healthcare provider organisations and HEIs a greater understanding of how clinical teachers experience their role. This could aid in the development of their own recruitment, retention, staff development and support strategies, and even inform changes to the way in which undergraduate medical education is delivered.

There were two main research questions and a number of sub-questions:

1. How do clinical teachers experience their role?
 - What do clinical teachers think their role is?
 - How do clinical teachers perceive their identity as a teacher, and to what extent does that integrate with their identity as a clinician?
 - How do differences in professional background impact on the experiences or perceptions of clinical teachers

2. How are clinical teachers prepared for and supported in their role?

- How do healthcare organisations and the university prepare, support and develop their clinical teachers?
- What do clinical teachers consider important in terms of training, support and development?
- To what extent do the perspectives of clinical teachers and organisations align regarding preparation, support and development?

3.2 Methodology

This section contains an overview of the conceptual framework of this research, the theoretical perspective adopted and clarifies my position as the researcher. The section concludes with an outline of the ontological and epistemological assumptions underpinning this research project.

3.2.1 Conceptual framework and theoretical perspective

The theoretical framework in which this research sits is that of social constructivism. Social constructivism adopts the world view that ‘individuals seek understanding of the world in which they live and work’ (Creswell, 2014) p.20). This understanding is developed in collaboration with other people, and is subjective, multiple and variable in nature. Therefore, research adopting this philosophy seeks to encompass the complexity of views, rather than to distil them into limited categories or ideas (Creswell, 2014). This philosophy was adopted as a basis for this research as it fits well with the research questions that were developed; an in-depth understanding of the clinical teacher experience was sought, rather than a more superficial overview or personal agenda. Consequently, individual interviews were selected as a data collection method as they enabled the detailed exploration of personal experiences.

Social constructivism makes specific assumptions about the nature of reality, knowledge and learning (Kim, 2001). Those assumptions as they apply to this research are set out in Figure 17 opposite.

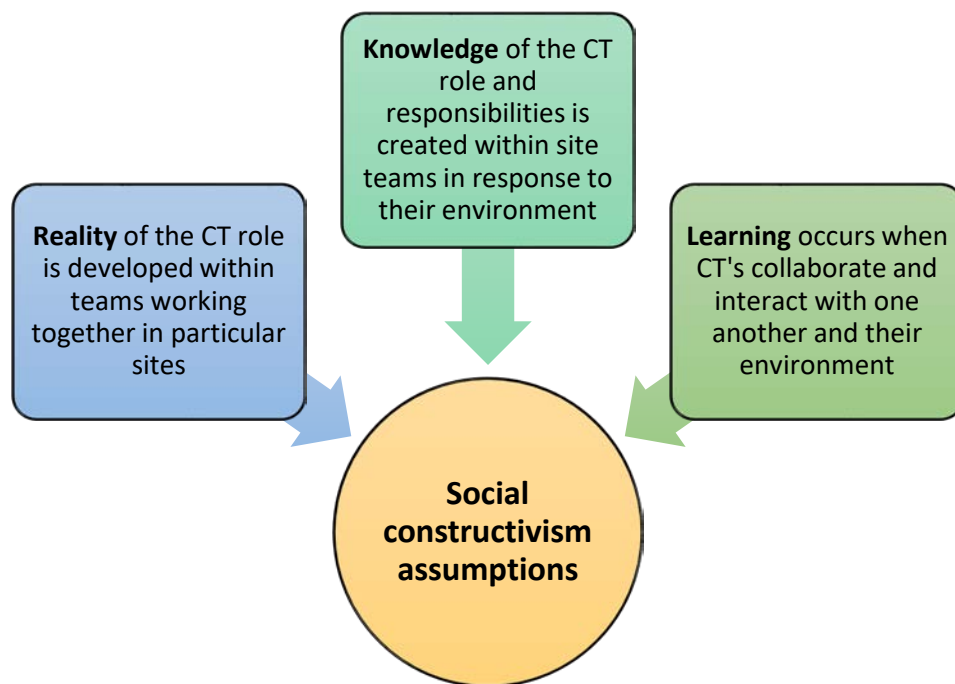


Figure 17 - Social constructivism assumptions relating to this research (based on Kim, 2011)

Another important element of the social constructivist ideology is that the researcher must recognise that their own background and experiences will shape the interpretation of research findings, and therefore they must 'position' themselves in the research to acknowledge this (Creswell, 2014). As a non-medically trained health professional and former practice teacher myself (and having worked for several years in a role of supporting clinical teachers for undergraduate medical students), I acknowledge that I have my own insights and views on the clinical teacher role, albeit from the educational rather than practice perspective in the case of medicine. A shared understanding was created between the participants and I during the interviews. Field notes taken during the interviews assisted in effectively framing the dialogue (for example, by recording body language and gestures which were not captured by the audio recording) and facilitated the interpretation of the data.

The complexities of multiple perspectives exist within this research (Maxwell *et al.*, 2013). It is important that effort is made to understand and interpret the findings of the research through the lens that the participants view themselves, rather than based simply on the words that are spoken (Jones and McEwen, 2000).

3.2.2 Ontological and epistemological assumptions

This research primarily adopts an interpretivist epistemology as I sought to develop an understanding of how clinical teachers themselves experience their role. A human instrument of data collection (myself, as interviewer) was used to interact with the participants to thoroughly explore their multiple constructed realities (Lincoln and Guba, 1985). Once all interview data had been collected, the role of the researcher was one of elucidating meaning from the data to build tentative theory. The interpretive epistemology of this research is underpinned by a subjectivist (relativist) ontology (Couch *et al.*, 2016). This recognises that the possibility of the researcher having neutral engagement with the data is not achievable, and nor is the possibility of uncovering a common truth. As such, this research was unlikely to lend itself to the development of universally applicable and succinct theory. Therefore, the focus of the analysis of the data, the presentation of findings and the discussion and conclusion of the research had to be sufficiently detailed to encompass a potentially broad range of themes and sub-themes prior to proposing tentative theories in relation to specific aspects of the research findings.

The nature of the research questions were exploratory and inductive, therefore a broadly qualitative research methodology was adopted. When considering methodological framework, a grounded theory approach was initially considered, as this method is focussed primarily on the discovery of theory from data which has been systematically obtained and analysed (Glaser and Strauss, 2009). As this research was conducted with a relatively small sample of participants from a single university population, the generation of theory may not have been possible from the data gathered.

The rationale for selecting a case study approach for this project was that not only did it fulfil the requirements of the research questions (and allow me to answer them in an appropriate way), unlike grounded theory there was no absolute requirement that theory was generated from the data. As Siggelkow (2007) contended, theory is a way of simplifying a complex reality whereas the aim of a case study is to provoke thought and new ideas. This exploration of new ideas was much more representative of the overall aim of this research, so a case study design was adopted.

3.3 Research design

This research is a case study design, focussing on a single University in the North of England. As a research strategy, case study was defined by Swales (2004) as a way of framing a particularity or bounded unit, providing guiding principles for the research design, process, quality and

communication. Stake (2013, p.438) adopted an eclectic approach and asserted that case study research constitutes a case within a 'bounded system', bounded by time and geographical location. The 'boundary' for this research is one of institutional context (an undergraduate medical programme offered by a single university) and role (clinical teacher involved in the delivery of FoCP). The case is clearly articulated in Figure 21 on page 72. An overview of the research design is presented in Figure 18 below.

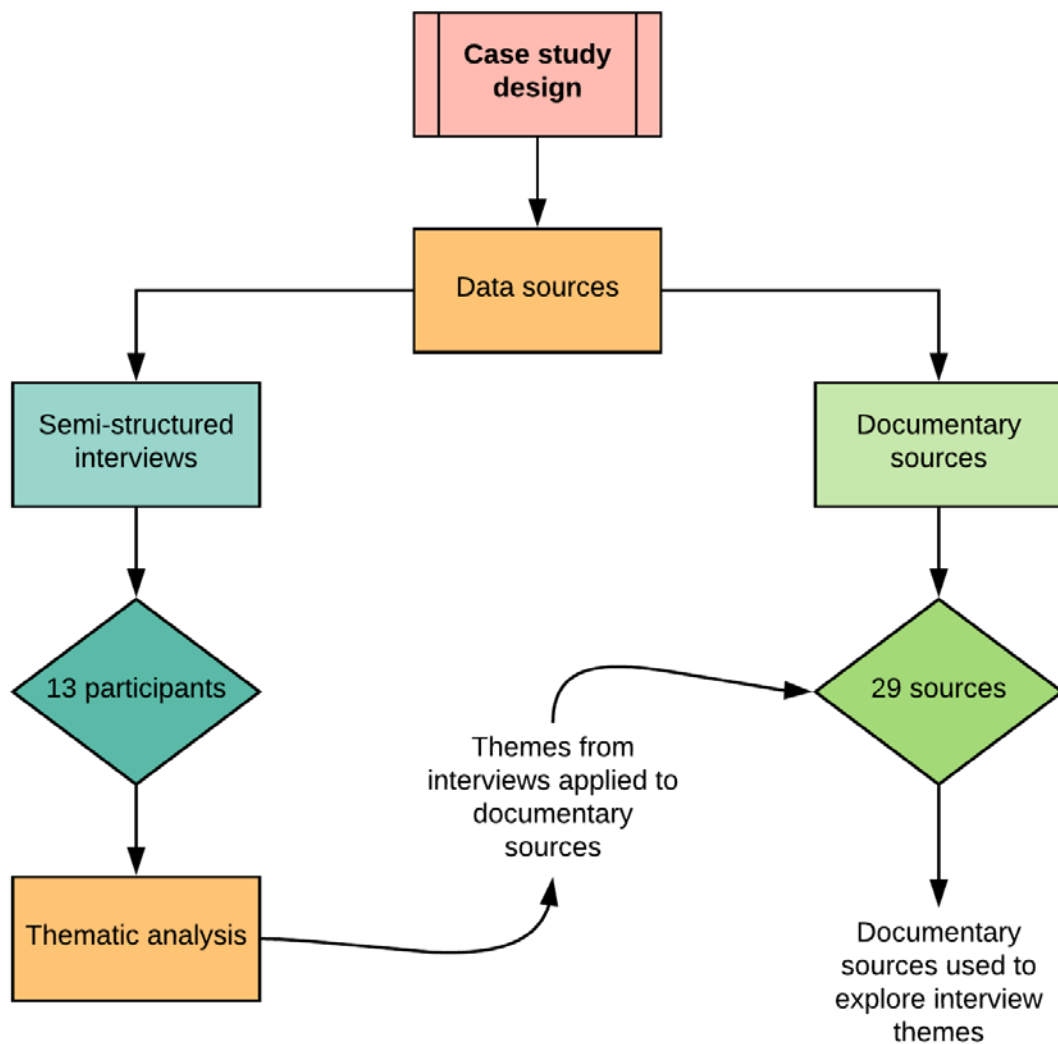


Figure 18 - Overview of the research design

Case study has been increasingly recognised as a valuable educational research method in recent years. Robert Yin (2009) took a more positivistic approach to the case study method than that of Stake and described three forms of case study (see Figure 19 overleaf).

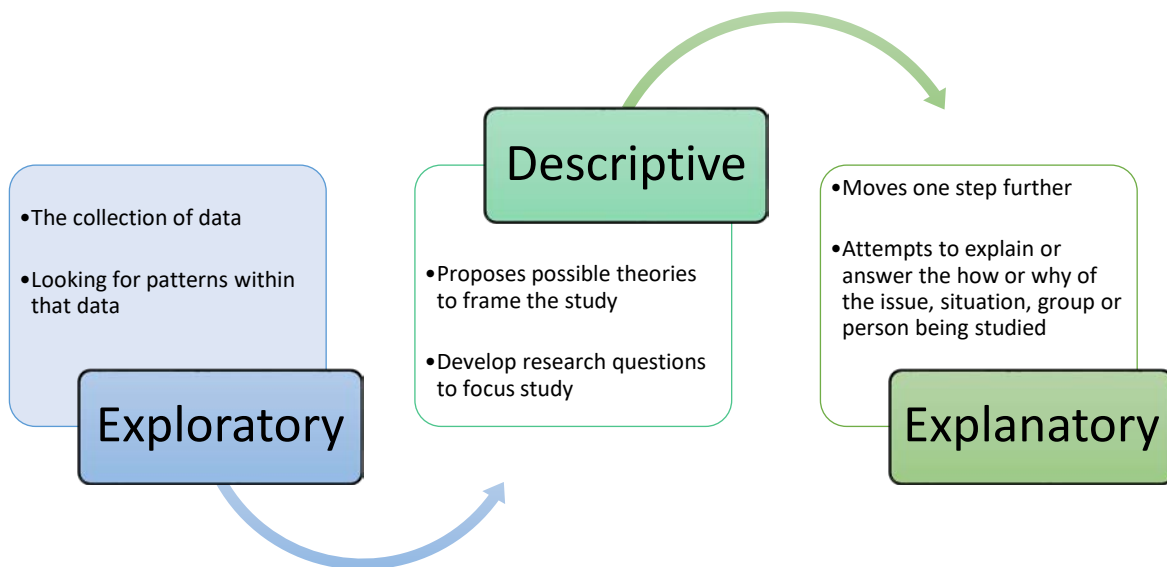


Figure 19 - Forms of case study (adapted from Yin, 1989)

The three forms of case study outlined by Yin broadly align with the three categorisations of educational case studies which Bassey described. Bassey (2006) likened the exploratory case study of Yin to his own theory testing case study. Similarly, Yin's explanatory case study aligns with what Bassey described as theory testing, and the descriptive case is reimagined by Bassey as a story-telling and picture-drawing case study. Hamilton and Corbett-Whittier (2012) refined this further and outlined five models for case study research (see Figure 20 below).

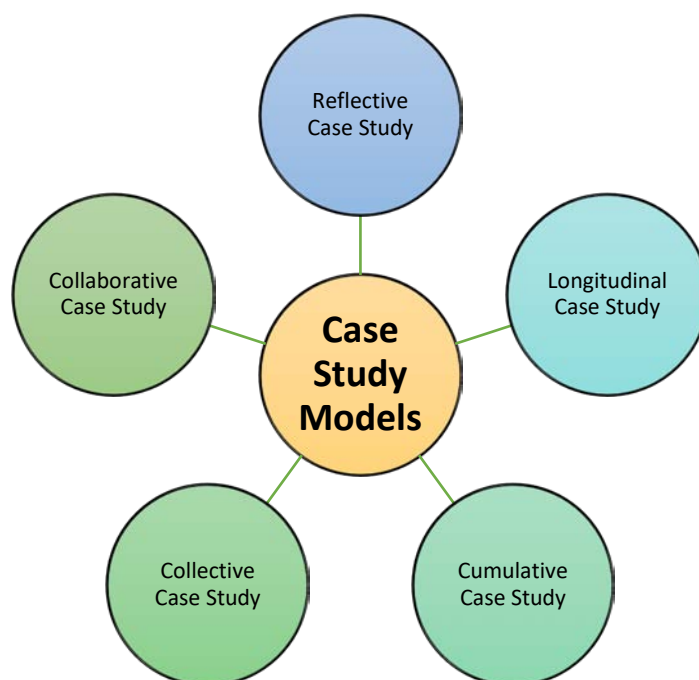


Figure 20 - Five models of case study (adapted from Hamilton and Corbett -Whittier, 2012)

This research can be described as an exploratory case study (Yin, 1989) or theory seeking case study (Bassey, 2006). These case studies seek to answer 'how?' and 'why?' questions (Takona, 2002, p.59) with the main aim of finding out what is happening in a particular case. Yin (1993) described exploratory case studies as having the function of defining research questions and subsequent hypotheses (perhaps for future study) and discovering theory by observing social phenomena. In this research project, both the questions begin with the word 'how' as the aim was to explore what was happening from the perspective of the participants, which is well-aligned with the purpose of an exploratory case study. Bassey (2006) advocated that theory seeking educational research should aim to disseminate this information to interested individuals in the form of tentative 'fuzzy propositions' and less tentative 'fuzzy generalisations' (Bassey, 2006, p. 58) following careful analysis, which is a good description of the way this research was conducted.

In summary, the model adopted for this research was that of the collective (Hamilton and Corbett-Whittier, 2012) or multiple (Yin 2009) or theory seeking (Bassey, 2006) case study. Creswell (2012) defined the collective case study as a single case study consisting of many different cases. In this research project, the 'case' is bounded by the definition of a clinical teacher, the University and the foundations of clinical practice course.

3.4 Research sample and sampling strategy

The university setting for this research classes itself as a regional medical school. With approaching 400 students in each of the five year-groups, the extensive clinical rotations of third and final year students means that at any one time almost 800 students will be on full-time work placement in the local health service. Concurrently, fourth year students are undertaking elective placements and first and second year students are involved in occasional hospital and general practice visits. This 'regional medical school' is therefore a necessity, as the number of medical students requiring placements is too great to be accommodated in a single city or county. Four organisational base units were formed, with each base unit covering a designated geographical area, each with its own NHS administrative team and managing base unit Sub-Dean.

The research sample of this study was carefully selected to ensure that as far as possible all base units were represented. This was important because the characteristics of each base unit are different. Some are compact and city-based, others are more rural and require that students and staff sometimes travel long distances between teaching sites. Considerations were made to ensure that the sample also represented clinical teachers from different professional backgrounds, with varying degrees of teaching experience (from new teachers to those in senior educational

management positions), with different teaching roles and with as broad a distribution of age and gender as practicable. Documentary sources were also sought compare the organisational approach and priorities with those expressed by the research participants.

According to Yin (2009), the sample composition must be made absolutely explicit throughout the research process by providing a clear description of the case boundaries. For the purpose of this study, the 'case' is summarised in Figure 21, and outlined in detail in chapter 1, section 1.4 – The research context.

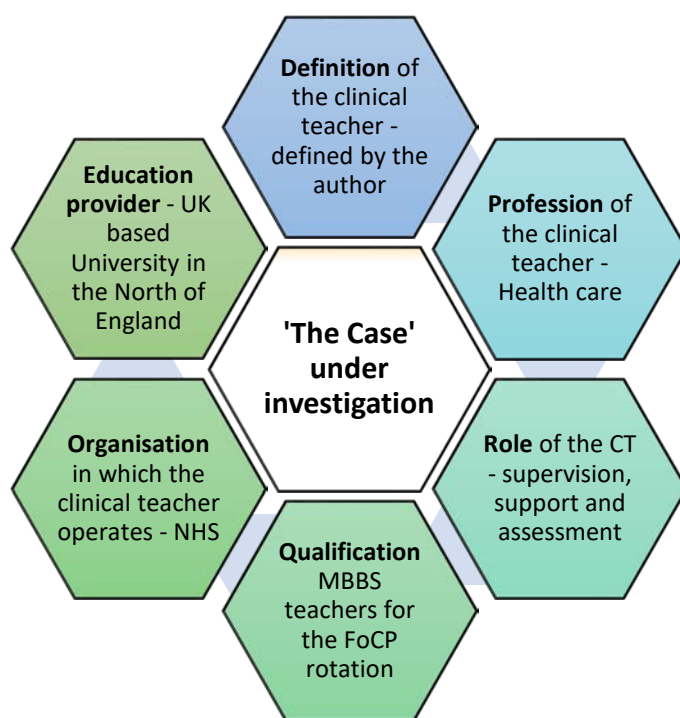


Figure 21 - The case boundaries

3.4.1 Inclusion and exclusion criteria

The definition of a clinical teacher used in this research was *a doctor or other healthcare worker employed in a health capacity by an NHS employer, with a responsibility for providing clinical teaching to undergraduate medical students*. As an adjunct to their primary clinical role, the clinical teacher is responsible for supporting, teaching and assessing student(s) undertaking the clinical component of an undergraduate MBBS degree, which may or may not be similar in nature to their own profession. To be eligible to take part in this research all participants and documentary sources were required to fully meet the inclusion criteria outlined in Table 4 (opposite).

Source	Inclusion Criteria	Exclusion Criteria
Interview participants	Qualified (if applicable) health care professional, such as a nurse, physiotherapist, dietician, occupational therapist or podiatrist, or a health care assistant with a remit in medical education.	Not a health care professional
	Member of their professions professional body where applicable	Not a member of their recognised professional body
	Employed by an NHS organisation as a health care professional	Not employed by the National Health Service
	Has undertaken the role of a clinical teacher for a student undertaking a the FoCP component of the MBBS undergraduate degree at the case study university	Has not undertaken the role of a clinical teacher for a student undertaking the FoCP component of the MBBS undergraduate degree at the case study university
	Has acted as a clinical teacher for at least one student in the previous two years	Has not acted as a clinical teacher in the previous two years
	Is able to provide valid informed consent	Is unable or unwilling to provide informed consent to participate in the study
	Does not work for a line manager with whom the researcher is associated	Works for a line manager with whom the researcher is associated
	Is not a current student on any module that the researcher is involved in teaching or marking	Is a current student on a module that the researcher is involved in teaching or marking
Documentary sources	Relating to the clinical teachers of the MBBS programme delivered by the university	Not relating to the clinical teachers of the MBBS programme delivered by the university
	Currently or previously available in the public domain	Not currently or previously available in the public domain
	If module specific, then relating to the foundations of clinical practice (FoCP) module	If module specific, then relating to modules other than the foundations of clinical practice (FoCP) module

Table 4 - Inclusion and exclusion criteria for interview participants and documentary sources

The study was open to a wide range of health professionals, and it was not envisaged that any of these criteria would severely restrict the number of eligible participants. However, if insufficient numbers of participants had become an issue, the criteria could have been altered to include private practitioners in addition to NHS employees.

3.4.2 Sampling of participants

The participants were selected using a purposive sampling technique. Toma (2006) asserted that purposive sampling is appropriate in qualitative research, where cases are chosen because they are interesting and representative rather than drawing a random sample from a population. Because of this, it is imperative the reader has enough information about the sample to understand the context of the research, and how the results of the research may be applied to other situations. The sample was selected using personal knowledge of the individual roles, experience and responsibilities of the clinical teachers gained through my former engagement role within the university. Within this role I was a designated link between clinical teachers in practice and the MBBS programme, which involved extensive networking and delivery of staff development sessions. This ensured that the sample of participants provided rich variation in terms of time in an educational role, professional background, educational seniority and base unit location within the parameters of the research inclusion criteria, to gain a range of illuminating perspectives.

An appropriate sample size is largely dependent on the homogeneity or heterogeneity of the research population, and the associated number of participants required to achieve data saturation (Dworkin, 2012). In this research, data saturation was considered to occur when no new insights were developed from the data rather than when no new experiences were being recounted (Mason, 2010). During this research it was necessary to balance the ideal situation of having a large enough sample to represent the perceptions and experiences of the population with the pragmatic requirement to keep the research of a manageable size which could be undertaken in the time available (Robinson, 2014). Heterogeneity of the sample population was desirable to fulfil the research questions in this study, so homogeneity of educational programme and course rotation of clinical teachers was sought thus reducing the potential sample size while maintaining consistency of context.

Contextual information for this research has been provided in Chapter 1 of this thesis, in section 1.4 - The research context. This section contained a description of the university, the FoCP course, the organisation of the regional medical school placements and the clinical teacher role. Due to the nature of the research participant group, it was not possible to provide a similar overview for the

healthcare employers, as participants were employed by many different hospitals, and with varying roles within that hospital. Each participant therefore would require an individual description relating to their employer organisation, which in turn may have compromised participant confidentiality as their identities may have been discernible from those accounts.

An initial sample of ten participants were selected for inclusion in the study and were informally approached to ascertain if they would be interested in taking part in the research. All invites were accepted, and word of mouth led to other potential participants volunteering their time if needed. If these initial cases had predictable or similar experiences, then this would be considered a large enough sample. If new insights or themes were still emerging, more interviews would be undertaken as indicated by the thematic analysis procedure outlined later in Figure 26 and described by Mason (2010). A total of thirteen participants were eventually recruited for this research as an additional three participants were identified during the participant recruitment phase who were all able to offer unique and valuable insights:

- **Participant 11** – an HCA with considerable experience of that role prior to becoming involved in education.
- **Participant 12** – a teaching fellow with an equally split teaching and clinical role, for whom an educational post was a stepping stone to a clinical specialty post.
- **Participant 13** – a senior clinical lecturer and consultant, striving to increase the educational proportion of their job while still fulfilling their clinical responsibilities on a busy ward.

Demographic information for the participants is provided in Table 5 (overleaf). The sample represented a range of professional backgrounds of both genders, clinical teaching roles and geographical locations (although it was not possible to recruit a participant from base unit 2).

Demographic information of research participants									
<i>Interview Participant</i>	<i>Career stage</i>	<i>Educational job role</i>	<i>Gender</i>	<i>Graduated from</i>	<i>BU location</i>	<i>Pre-teaching experience</i>	<i>Profession</i>	<i>Was participant a student at a current BU as an undergraduate?</i>	<i>Time in education post</i>
01	Nurse	Senior Clinical Lecturer	F	N/A	BU 1	11 - 15 years	Nurse	N/A	15 years
02	Con.	Base Unit Sub Dean	M	Other HEI	BU 1	6 -10 years	Doctor	N/A	15 years
03	Nurse	Academic	F	N/A	N/A	11 - 15 years	Nurse	N/A	7 years
04	SHO	Teaching Fellow - 100% teaching	F	Case HEI	BU 1	1 -5 years	Doctor	Yes	2 years
05	GP	Academic	F	Case HEI	N/A	6 -10 years	Doctor	N/A	10 years
06	F3	Teaching Fellow - Split role	F	Other HEI	BU 4	1 -5 years	Doctor	N/A	1 year
07	F3	Teaching Fellow - 100% teaching	F	Case HEI	BU 1	1 -5 years	Doctor	Not disclosed	1 year
08	F3	Teaching Fellow - 100% teaching	M	Case HEI	BU 1	1 -5 years	Doctor	Yes	1 year
09	F3	Teaching Fellow - 100% teaching	F	Case HEI	BU 1	1 -5 years	Doctor	Yes	1 year
10	HCA	Educational HCA	F	N/A	BU 1	1 -5 years	Health Care Assistant	N/A	9 years
11	HCA	Educational HCA	F	N/A	BU 1	6 -10 years	Health Care Assistant	N/A	9 years
12	F3	Teaching Fellow - Split role	M	Case HEI	BU 3	1 -5 years	Doctor	Yes	1 year
13	Con.	Senior Clinical Lecturer	M	Case HEI	BU 1	11 - 15 years	Doctor	Yes	10 years

Table 5 - Demographic information of research participants

3.4.3 Research participants

Data were gathered from participants by means of semi-structured interviews and are presented in this thesis in Chapter 4 – Findings. The richness of the data was central to the research aim and questions of this research. The open and flexible structure of the interviews facilitated the expression of perceptions of clinical teachers on a wide range of issues that they elected to highlight. Probing questions were used to further explore participants opinions where required, and prompts were used when insights were not already volunteered alongside descriptions of experiences by participants.

3.5 Data collection methods

This research explored the way that clinical teachers defined their own professional identity by foregrounding participant voice and their identity to allow them to define who they were without imposing labels on them. In order for this to occur in a meaningful way, Evers and Toelken (1994) asserted that interviews needed to be perceived by participants as safe, acceptable, respectful and confidential. I have indicated the strategies adopted in this project to address each of these areas in Figure 22.

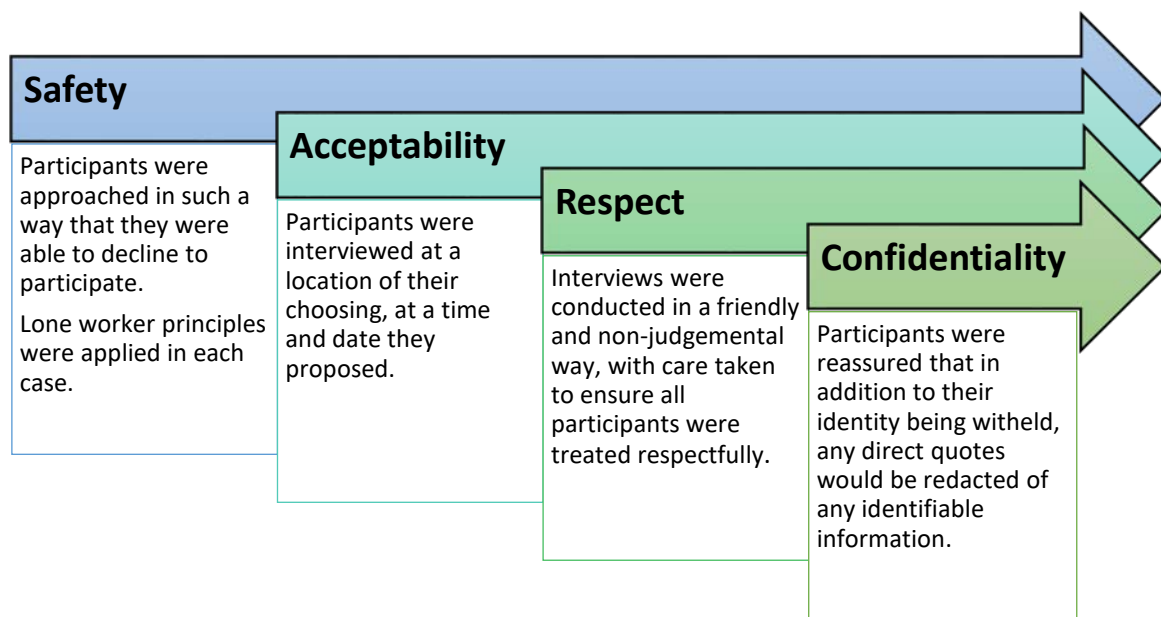


Figure 22 - Project strategies to address the four essentials for participant trust (adapted from Evers and Toelken (1994))

Thirteen semi-structured interviews were used as a primary data collection tool, each interview being approximately 1 hour in duration. The benefits of interview as a data collection tool was that they were able to specifically and explicitly target the case being investigated. Interviews allowed the participants not only to explain what their perceptions and experiences were, but also offer up any explanations or theories that they had to explain why this may have been the case. It was also important to be aware of the possible problems with this method. If interview questions were poorly constructed, they may not have adequately answered the research questions. It was anticipated that the initial 'practice interview' (outlined in section 3.5.1) would have helped to minimise this issue. There may have been response bias due to the position of the researcher as an insider. This was addressed by not including any clinical teachers that I worked with or had teaching responsibility for, so that I was somewhat removed from their working role and had no influence over their practice. There may have been issues in reflexivity, where the participant provided information that they

anticipated the researcher may have been either expecting or wishing to hear. There may also have been inaccuracies resulting from poor recall on behalf of the participants. Both these issues were difficult to address but were explored and the impact mediated through ongoing analysis of transcripts throughout the interview phase. There was also a collection of documentary evidence, as detailed in section 3.5.4.

3.5.1 Interview approach adopted

In advance of the data collection, I undertook a practice interview with a former colleague. This proved invaluable as it highlighted some technical issues where the digital voice recorder did not record well enough to capture all aspects of the interview (as more quiet sections were very difficult to hear) and enabled some improvements to be made to the interview question schedule. Although the initial questions did elicit the required information from the participant, they did not prompt investigation of themes raised during the session; they seemed more like a market research exercise rather than gaining the deep insight and understanding that was intended. The interview schedule was subsequently modified to include sample prompts and 'pauses for thought' which proved very useful for the main data collection.

The interviews were recorded to allow the production of an accurate and full transcript of each interview. This also enabled me to focus clearly on the interview itself and make notes during the interview session (such as the participants' body language or additional prompts for follow up later in the interview) and after the session to record my initial ideas to act as prompts during the data analysis (Ritchie *et al.*, 2013). The potential limitations of recording an interview session relate primarily to potential anxiety of the participant and the difficulty of obtaining a good quality recording. In order to minimise participant anxiety, the recording strategy was made explicit during the consent process on the participant information sheet, so participants were expecting the interview to be recorded when they attended. The interviews were conducted in quiet, private rooms at the participants' place of work (or in a room at the University at their request) to ensure minimum disruption to the participant, and privacy for them to express their thoughts candidly and maintain confidentiality in relation to their work colleagues. Recordings were made using a digital device, and a spare device was available in case of failure. A test recording was made (and deleted) prior to each interview, which acted as a form of icebreaker to the participant, but also allowed me to ensure the quality of the recording, and thereby the accuracy of the later transcription.

Each interview was personally transcribed verbatim to ensure consistency and accuracy, which also allowed the insertion of relevant points noted during the interview, such as body language cues,

mood and demeanour of participant, areas of emphasis or emotion and laughter. Each transcript was read and coded at 'topic' and 'descriptive' levels (Richards, 2014) prior to undertaking the next interview. This strategy ensured familiarity with the broad issues and context of each interview and enabled any similarities or differences to be explored with subsequent participants. Each interview recording and transcript was identified with a number unique to that participant. A separate key was kept ensuring that it was possible to link each transcript back to its participant in case of their requested withdrawal from the process (in line with the initial consent documentation).

A decision was made not to send full transcripts of interview data to participants for 'formal validation' prior to analysis. The rationale for this was that since the interviews had been transcribed verbatim and with considerable care, they were an accurate record of the interview itself. In asking participants to comment upon the transcript, this would in effect have generated a second 'order' of data, rather than acting as some form of 'validation'. The interpretive stance of this research was in conflict with this potentially simplistic 'tick box' confirmation of meaning, as posited by Birt *et al.* (2016). However, in order to give participants the opportunity to reflect on their interview and to comment on the veracity of their perspectives as articulated at the time of the interview, they were informed that they could send a follow-up email outlining any factors that they wished to expand upon or clarify. Two participants elected to send such emails, and this text was added to their interview transcripts prior to thematic analysis.

An early supporter of case study for educational research was Stenhouse (1978). Stenhouse viewed case study as an effective means of capturing the complexities of a research topic, but also recognised that a key component of this complex data was that they should be verifiable – and as such, field notes were an important record of the study and should be available to support the research report. Field notes were taken as part of this research and comprised part of the research diary to provide a record of the investigation (the use of the research diary is outlined in greater detail in section 3.7).

3.5.2 Development of the question schedule

In order to meet the requirements of this research project, it was necessary to keep the question schedule broad and general, to reflect the social constructivist ideology (Creswell, 2014). This approach allowed participants to frame their interpretations within the context of their own perceptions and ideals without constraints, yet still provided a broad overview of discussion topics to keep the interview aligned to the research questions.

The interview schedule was constructed in four themes, with a selection of questions in each theme.

The four themes were:

1. **Introductory questions** to put the participant at ease. This strategy was advocated by Ranney *et al.* (2015) and was useful for gathering demographic information and relax the participant at the beginning of the interview, prior to asking potentially personal and challenging questions later. Participants were asked about their role as a clinical teacher, what professional background they came from and what their experiences were as an undergraduate student themselves (where appropriate).
2. **Motivation and identity.** These questions focussed on participants' initial motivation to pursue a clinical teaching role, how they found out about the role and whether that motivation had changed over time. Participants were also asked how they viewed themselves as clinical teachers. This theme provided useful contextual and background information about each participant, which offered a valuable framework to refer to when analysing data regarding question themes 3 and 4.
3. **Development and support.** This theme contained questions relating to the preparation of clinical teachers prior to taking up their role, and the ongoing training and support available to them once they were in-post. This theme was designed to address research question 2.
4. **Experiences.** This theme contained questions relating to how clinical teachers experienced their role, both positively and negatively, and how they felt the experience might be improved for them. This theme was designed to address research question 1.

The full indicative question schedule is included in Appendix 5 – Indicative interview question schedule.

3.5.3 Refining interview schedule and interviewer skills

Arrangements were made to shadow a research colleague as he conducted interviews as part of another research project in which we were both involved. This colleague also offered to help me run a 'mock' interview to practice these skills in vivo if necessary during the interview phase.

I have previous experience of interviewing research participants, and had prior interview training both as part of a previous Master's degree programme and through employment. While no problems were anticipated with my interviewer skills at that point, it was important that the subject

area was explored with sensitivity and tact. As an 'insider researcher', I wanted to be sure that I felt comfortable before commencement of the main data collection. However, this was not necessary, as the previous practice interview served this purpose.

The issue of power dynamics during the data collection had been considered and was mitigated as far as practicable:

- I did not recruit participants to this study who I directly worked with as a lecturer
- I had no line management responsibilities for any of the potential participants.

3.5.4 Documentary sources

As an adjunct to the interviews, a concurrent search for and collection of documentary sources was undertaken in accordance with the case study design of the research. Documentary sources were important in revealing the organisational context of the role and useful in identifying relevant policy statements or guidelines; these were particularly valuable in helping to address research question 2 and its sub-questions.

Documentary sources originating from the university which offered the undergraduate medical programme and were easily obtained due to my position as an 'inside researcher'. These sources were identified by conducting a manual search of the TSE intranet site (where copies of all documents made available to clinical teachers by the university are held), and by liaising with administrative staff involved with clinical teacher staff development (to obtain meeting agendas and staff development delivery information).

Documentary sources originating from outside the university (produced by NHS organisations) were not collected. Although it had been anticipated that additional documentary sources may have been volunteered by the participants, they reported that the documentation they routinely used was that provided by the university and available on the TSE, rather than any formal 'in-house' policies or documentation from their employing organisation.

Specific documentary sources that were included were programme handbooks, clinical teacher guidelines and staff development timetables. An overview of these twenty-nine identified sources is provided in Table 6 overleaf.

Documentary sources included in the research		
Title	Type of document	Description and relevance
MBBS Degree Programme Handbook 2017-18	Educational programme handbook	Contained rules and regulations of the MBBS programme, along with guidance about how clinical rotations were conducted.
MBBS Stage 3 Handbook	Student handbooks	Student advice and guidance relating specifically to year 3 of the MBBS. Further guidance on how clinical teaching was conducted.
Primary Care Stage 3 Study Guide		Guidance specifically relating to the delivery of the primary care element of FoCP.
Stage 3 Primary Care Teachers Guide 2017	Clinical teacher guide	
FoCP study guide 2018	Module study guide (MBBS)	Guide containing specific information relating to the delivery, learning outcomes and assessment of FoCP.
Induction invite letter	Letter	Invitation from the university to all base units for all new clinical teachers to university induction session
Staff induction 2017-18	PowerPoint presentations given as part of the new clinical teacher's induction session (offered by the University)	MBBS overview, including structure, assessment, governance and expectations of clinical teachers.
Staff Development Opportunities and the Professional Development Plan		Details of development opportunities available to clinical teachers
Ensuring safe and effective care through training		Requirements of clinical teachers regarding professionalism monitoring and assessment.
Teaching Support Environment (TSE) Navigation Presentation		Functions and use of the TSE (a bespoke intranet site for clinical teachers).
Teaching and Learning in the Classroom (Campus) Study Guide 2017-18	Module study guides (Postgraduate Certificate in Medical Education). All Teaching Fellows attend this one-year, part-time programme during their post.	This module focused on theories of learning, classroom teaching strategies and lesson planning.
Teaching and Learning in the Classroom (e-learning) Study Guide 2017-18		
Teaching and Learning in the Workplace (Campus) Study Guide 2017-18		This module focused on teaching strategies and practice in clinical settings, with specific emphasis on teaching when time is limited.
Teaching and Learning in the Workplace (e-learning) Study Guide 2017-18		
Understanding Programmes of Learning (Campus) Study Guide 2017-18		This module focused on curricular theory, developing schemes of work and how course rationale had an impact on curriculum design.
Understanding Programmes of Learning (e-learning) Study Guide 2017-18		

Title	Type of document	Description and relevance
E-learning staff development sessions available on the TSE	Clinical teacher information and development resources available e-learning, on-demand	Variety of on-demand, instant access e-learning programmes delivered via the TSE.
Teaching Support Environment (TSE)		The university intranet site for all clinical teachers. Contained programme information and was a repository for all resources related to clinical teaching.
Equality and Diversity training		On-line training package that all clinical teachers completed every 3 years (except when comparable training had already been undertaken).
The Loop - Issue 25 June 2017		In-house university newsletter for clinical teachers.
Staff Development sessions from Aug 2016 to date	Timetable	Information on all staff development sessions for clinical teachers provided by the university. Each session was offered multiple times each year at various sites across the regional medical school and were free of charge for clinical teachers.
Staff Development Outcomes	Learning outcomes mapping document	Details of specific learning outcomes for each clinical teacher staff development session offered by the university.
GP Teach the Teachers 2017-18	Staff development day programmes	Annual staff development day for clinical teachers in primary care settings.
Mental Health Teaching for Medical Students in Theory and Practice		Occasional staff development day delivered by mental health teachers, for mental health teachers.
TF Meeting Agenda 05-11-2014	Meeting agendas	Support meeting for teaching fellows, held at the university and facilitated by the Sub-Dean for Staff Development.
Teaching Fellow Meeting Agenda 14-01-2015		
Clinical Teaching Forum Programme 2013	Conference programmes	Biennial free-of-charge conference for all staff involved in clinical teaching from across the regional medical school. A variety of guest speakers were invited, and there were opportunities for specialty-specific and staff development break-out sessions and networking.
Clinical Teaching Forum Programme 2015		
Clinical Teaching Forum Programme 2015		

Table 6 - Documentary sources included in the research

3.6 Data analysis and synthesis

This section outlines the process used to analyse the findings of this research. The process of descriptive, topic and analytical coding of data is described. The section concludes with an overview of how theory was developed from the data.

3.6.1 Thematic analysis

The analysis strategy adopted for the interview data was thematic analysis. Thematic analysis can be defined as ‘the process of summarising and reporting written data – the main contents of data and their message’, whilst still respecting the quality of the data and making explicit the context in which it exists (Cohen *et al.*, 2007).

There were a number of advantages of thematic analysis reported in the published literature. It is unobtrusive to undertake, and it can be subjected to reanalysis or replication in order to further explore the findings (Cohen *et al.*, 2007). Mayring (2004) asserted that by the use of thematic analysis, the results of the analysis are systematic and verifiable as the analysis focuses on language and contextual meaning which are explicit and unambiguous in the write up. However, this does require that the procedures used in the generation of that analysis are transparent.

A key strength of thematic analysis for this research is that the same underlying processes and procedures could be applied to a variety of data sources within the same study. This is a particularly important element for research such as this, as the very nature of a case study necessitates the gathering of data from a wide variety of sources to frame the case appropriately.

The analysis of qualitative data should be considered as more than simply identifying themes, but of demonstrating how the data have been used and interpreted to build an argument of the key outcomes. As Bazeley (2009) asserted, ‘the strength of analysis will be recognised even by those who may work differently, while descriptive reporting is likely to be unconvincing even to those familiar with qualitative methods’.

There are a variety of terms used in the field of thematic analysis to describe the ‘levels’ of theme being discussed – with *concept*, *category* and *theme* used interchangeably (Bazeley, 2009).

For the purposes of this research, the following terminology was adopted:

- **Category** – to refer to the descriptive initial coding
- **Theme** – to refer to an idea that has been drawn from the data
- **Concept** – to refer to more abstract elements

Thematic analysis of the interview transcripts was employed, using a system consistent with the exploratory nature of this study, and described by Guest *et al.* (2011). There were no predetermined data coding or categories, as all themes were developed in an inductive manner from the data. Implicit and explicit ideas within the data were identified by myself as the researcher and presented as themes. Those themes were then compared to the documentary sources collected, which provided both a context for the particular participant and an indication where their perceptions were in agreement or at odds with the textual data relating to their role.

The first step of the formal thematic analysis process involved listening to the interview recordings in conjunction with reading the transcripts and my own notes to ensure that I was familiar with each interview. As Rapley (2004) explained, this approach enables the researcher to generate, check and refine analytic hunches but also to construct a textual record of the interview for further review and analysis. Rapley went on to note that by listening to the audio recordings alongside re-reading of the transcript the researcher is able to get a sense of the interactional, collaborative work of the speakers (Rapley, 2004).

Once the interviews and formal thematic data analysis of transcripts were completed, those final codings were used for detailed comparison with the documentary sources to provide a context regarding how themes reported by participants were reflected within the university documentation. This strategy adopted a simple framework approach (Mason *et al.*, 2018) where the existing themes generated from the interview data were compared against the documentary sources to highlight areas of consonance or dissonance. The application of a systematic coding process which can be applied to all data sources (both interview transcripts and documentary sources) was advocated by Grbich (2012) to ascertain trends and patterns between and within sources. In order to add a further dimension to the analysis, the final codings were mapped to the AoME five key practice domains to highlight areas that were most prominent (or not considered at all) by the clinical teacher participants (see Figure 23 overleaf). This occurred in stage 3 of the final analysis (proposed by Bazeley, 2009 – see Figure 26 on page 89), as part of relating the categories identified to each other and the wider educational context in order to develop theory.

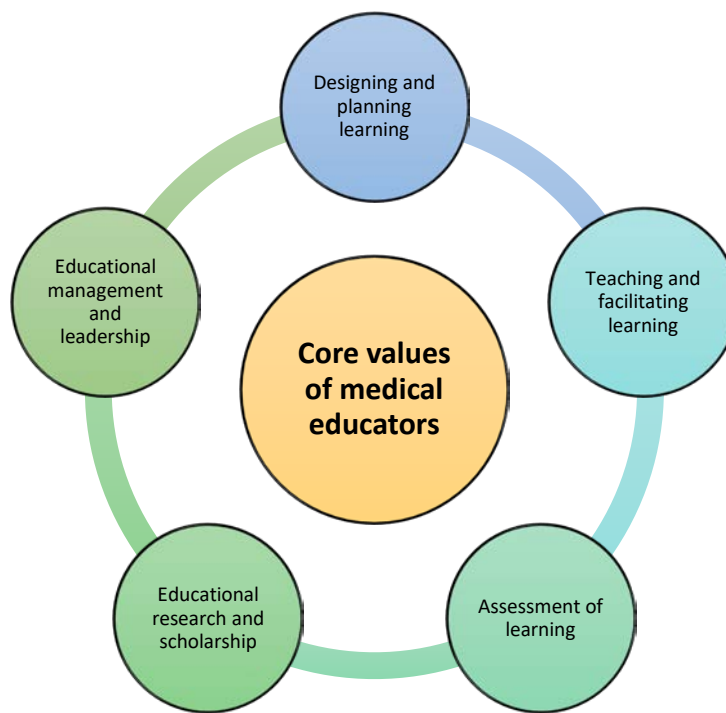


Figure 23 - AoME five key practice domains

This circular analysis procedure enabled me to identify not only the key experiences and issues identified in the interviews, but also to track back to the documents to see where (if anywhere) these elements were articulated in the support documentation from the educational institution. This element of the process was an important step in assessing not only existing institutional awareness of the experience, identity and support of clinical teachers for the MBBS programme, but also to propose future staff development training sessions, modifications to documentation and procedures for the recruitment, retention and management of this key group of staff. In addition, it also had potential utility in revealing any inequity of esteem or prioritisation of clinical teaching in relation to the AoME standards. This has the potential to be a key driver for future development of institutional staff development sessions, so it would be very useful to have an insight from clinical teachers as to how they integrated teaching with their clinical practice. An overview of the entire process is provided in Figure 26 (page 89).

3.6.2 Coding of data

During the data analysis process, the codes that emerged from the data were subdivided into three main groups according to the nature of the information being examined in a process recommended by Richards (2014):

1. **Descriptive coding** – information that describes the case (such as the job role, level of involvement with teaching, number of years teaching, etc.). This information was used to allow the data to be sorted and examined according to those attributes.
2. **Topic coding** – the allocation of broad topics to passages of the written transcripts, requiring little (if any) interpretation (an example of this may be ‘the teacher relationship with non-teaching colleagues’, or ‘feeling valued by the employer’). Having coded the transcripts, these categories aided in the drawing together of all related material for detailed reading and comparison.
3. **Analytical coding** – where the meaning of the data is considered in context by the researcher and categories are created to express ideas about the data. Again, coding in this way enables information to be brought together in an organised and systematic way for comparison, reflection and refining by the researcher. An example of this coding may be ‘internal tension between the ‘teacher’ and the ‘clinician’.

Lichtman (2012) provided a useful six-step model for the process of coding within conventional thematic analysis. The model has been represented diagrammatically in Figure 24.

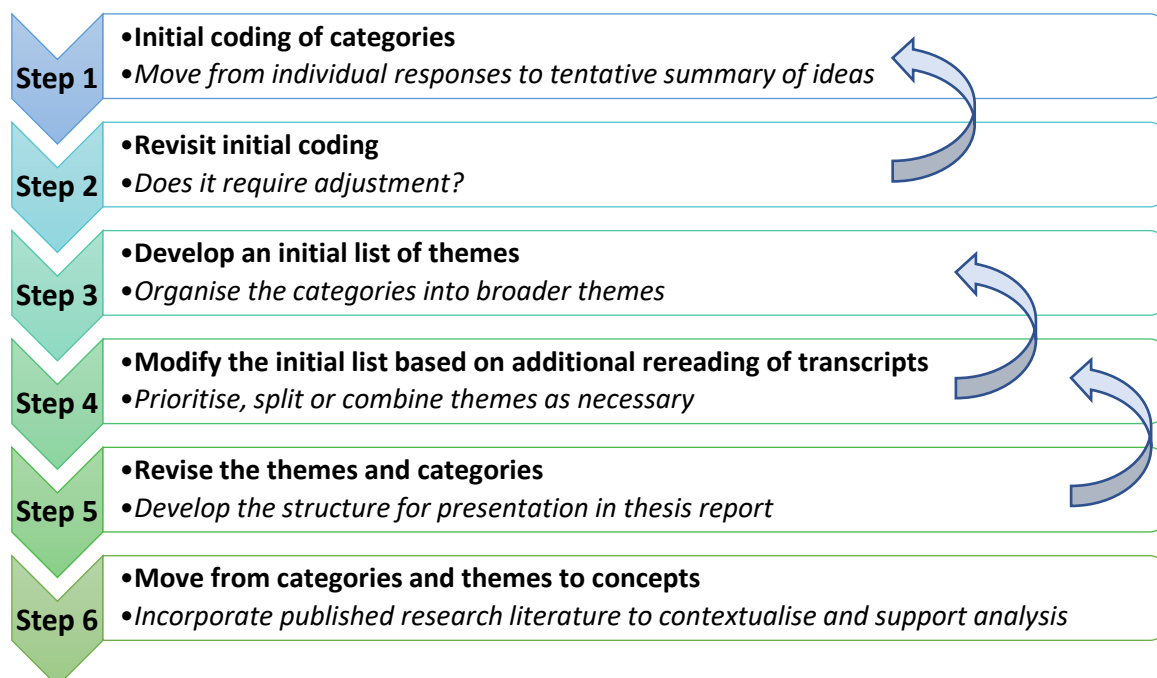


Figure 24 - Process diagram for data analysis (adapted from Lichtman, 2013)

These six steps have been adopted within my own thematic analysis strategy, which is presented in Figure 26.

3.6.3 Process of analysis

Bazeley (2009) proposed a three-step model for the review of qualitative data and the development of theory, once the coding process has been undertaken. This particular model of 'describe – compare – relate' was recommended by Bazeley in order to aid the researcher in producing an integrated analysis of findings (see Figure 25).

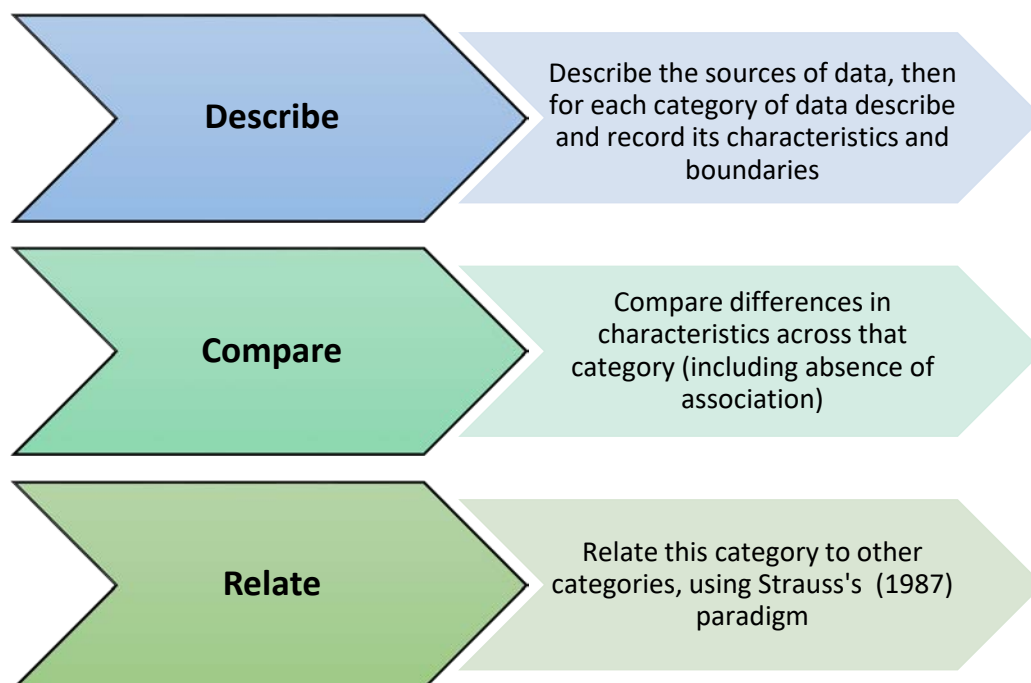


Figure 25 - 'Describe - Compare - Relate' model (adapted from Bazeley, 2009)

A data analysis strategy was devised which integrated the ideas of both Lichtman (2012) and Bazeley (2009) and is presented in Figure 26 as a flow chart. The rationale for combining these approaches was two-fold. Firstly, to ensure trustworthiness of analysis it was important that there was a clear and unambiguous protocol for the development of themes from the data. This strategy had to be clear to readers of the thesis to enable them to replicate or adapt the research in their own organisations and facilitate meaningful comparisons with the findings of this research. Secondly, the aim was to produce a final thesis that proposed theory developed from the findings. This could then

be applied to the staff development programme and re-evaluated at a future date. A simple narrative account of observations made would not serve this purpose, nor fulfil the obligations of a doctoral thesis. The final stage of analysis advocated by Bazeley (2009) allowed the exploration of the data in a way that supported the development of theory. An example of how this coding strategy was applied to the transcripts is included for information in Appendix 6 – Example of coding.

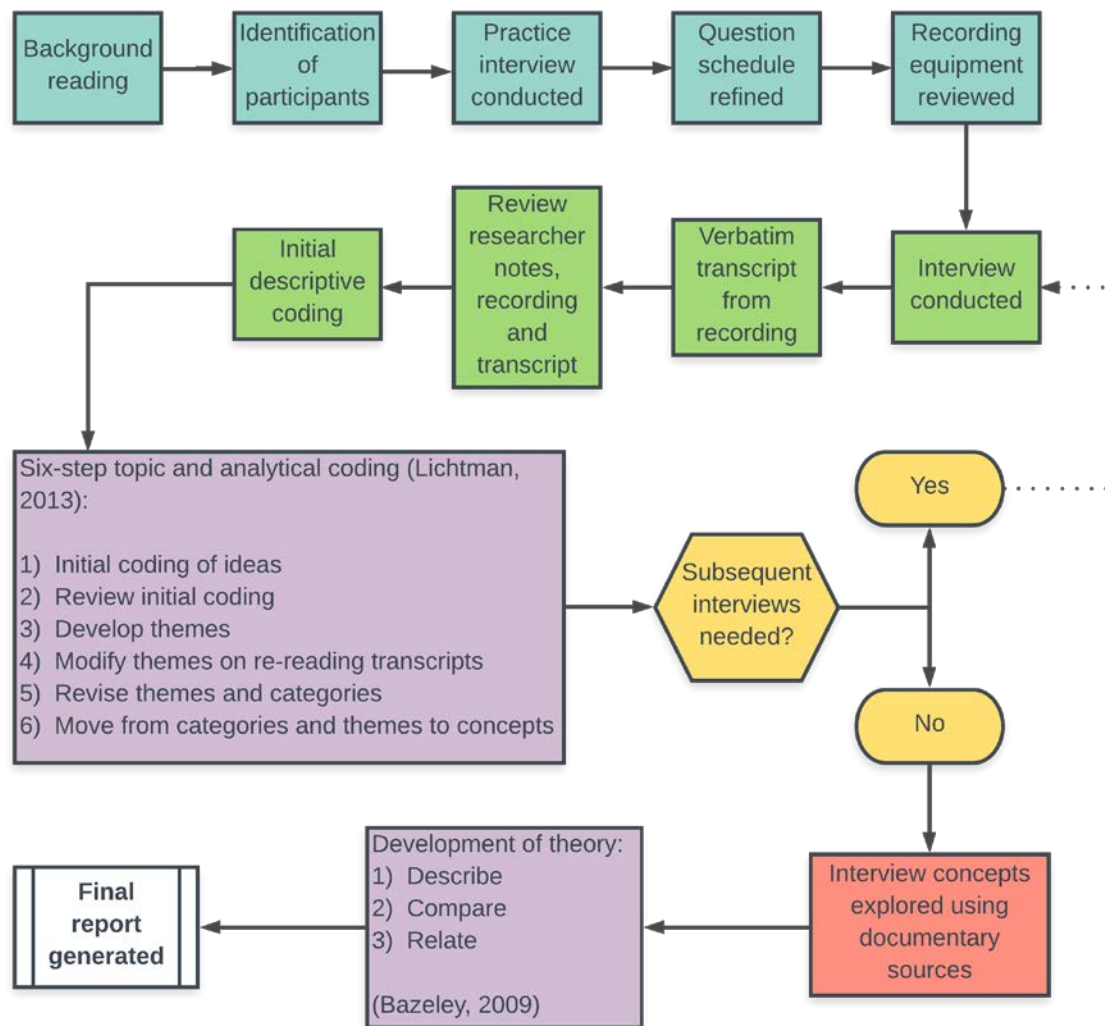


Figure 26 - Thematic analysis strategy (adapted from Lichtman, 2013, and Bazeley, 2009)

3.7 Reflexivity

Within a qualitative enquiry such as this, the researcher may be considered as a primary instrument in the collection and analysis of data (Stake, 1995, Merriam, 1998, Glesne, 1999). It is therefore necessary for researchers to understand why they may view a particular situation in the way they do,

or what may limit their ability to see certain things (Russell and Kelly, 2002). In order to do this, Watt (2007) asserted that a reflexive approach is essential, where careful consideration is given to the phenomenon being investigated in addition to the ways in which the researcher's own beliefs, behaviour and assumptions may impact on the study.

I kept a research diary throughout the whole process of the research as recommended by Lamb (2013) in order to acknowledge and incorporate reflexivity in relation to my own reflections as a researcher during the course of the project. A research diary such as this has been described as an essential part of a qualitative research project, in order that the researcher is prompted to reflect on different areas of the process and their own perceptions (Blaxter *et al.*, 2001). To ensure that an appropriate range of notes are recorded, Hughes (2019) suggested four categories of notes, as outlined in Figure 27. An excerpt of a methodological note from the research diary kept during this project is provided in Appendix 7.

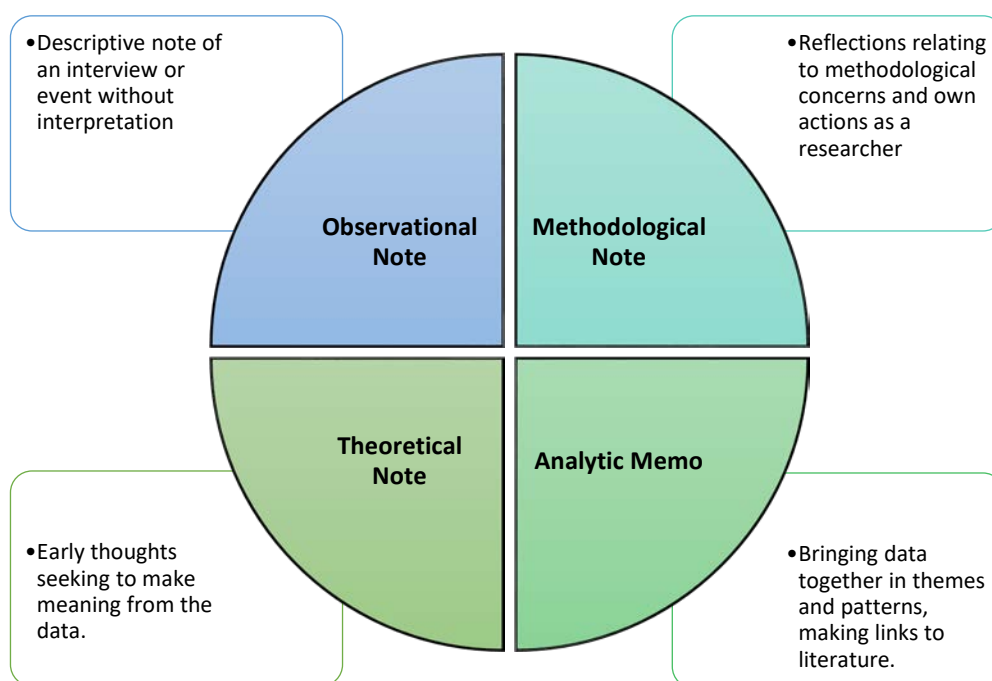


Figure 27 - The four sections of the research diary (adapted from Hughes, 2019)

This diary was reviewed at regular intervals during the research but was particularly useful at the key points as indicated in Figure 28.

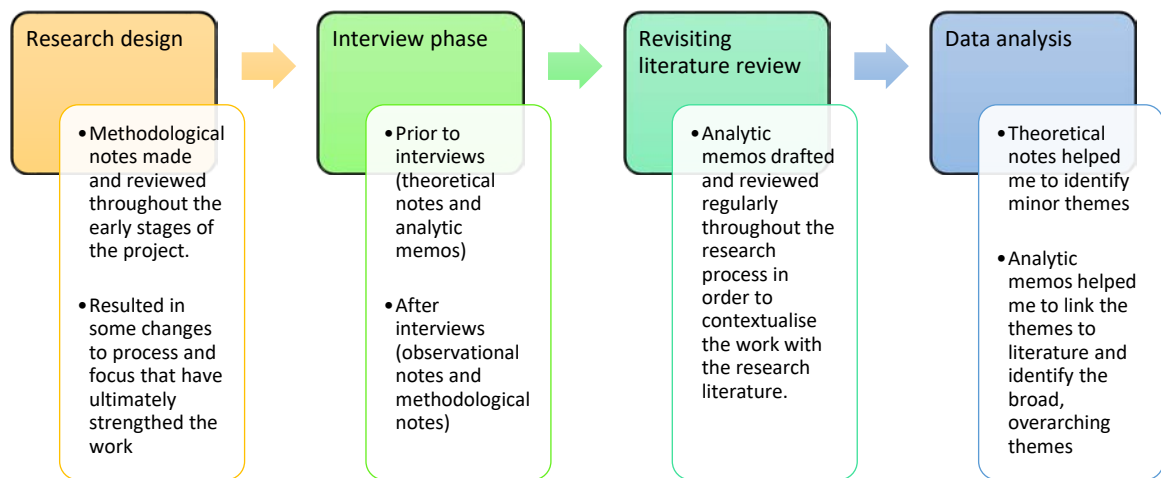


Figure 28 - Audit trail outlining role of the research diary

3.8 Ethical considerations

As with any research project involving human participants, there are several ethical considerations that must be addressed prior to any data collection. This study complied with the recommendations made by the British Educational Research Association (British Educational Research Association, 2004) to ensure that all stakeholders were treated ethically and with respect for their rights and dignity.

As the participants were likely to be NHS employees it was unclear if NRES ethical approval would also be required. The NRES and Health Research Authority provide an online tool (Health Research Authority, 2018) to aid researchers in deciding whether their project is viewed as ‘research’, and therefore needs to obtain formal NRES approval. For this case study, NRES approval was not required because it:

1. Did not randomise participants to particular groups
2. Did not change patient treatment plans or care
3. Would not be statistically generalisable

To confirm full compliance, the local NHS research and development department was consulted for further guidance and support prior to undertaking the data collection, which confirmed that NRES approval would not be necessary.

Ethical approval for the study was sought and obtained from the Open University Human Research Ethics Committee. In order to establish if a proposed study will require formal ethical approval, the Open University require researchers to complete a Research Ethics Risk Checklist (Open University, 2013a) and if indicated, a full proforma (Open University, 2017) provided by the Human Research Ethics Committee (HREC). The research ethics checklist indicated that full approval would be necessary, so the proforma was completed and submitted and HREC approval was granted in April 2017 (Appendix 8 – Open University Human Research Ethics Committee (HREC) approval). Ethical approval was subsequently sought and granted from the university with which this research was undertaken.

Participant Information sheets for the study were prepared and are included in Appendix 9 – Project information sheet. The information sheets were written in accordance with Open University guidelines, using a proforma available from the Research Ethics website (Open University, 2013b) as an initial template. The information sheet was written using language appropriate for a clinical teacher, where it was assumed that the participant would have a baseline understanding of the role of a clinical teacher, and therefore very basic terms would not require explaining further in the participant information sheet. Formal written consent was obtained from participants after they had read the participant information sheet and expressed a desire to take part in the research. Again, the consent form was based on an Open University standard proforma (Open University, 2013b) and is included in Appendix 10 - Participant consent form. No vulnerable participants or participants under the age of 18 were involved in this project.

Ethical decisions were made regarding issues such as:

- **Maintaining confidentiality** and ensuring participants are not identifiable in the research report. All participants' names, specific clinical occupations, gender and employing institution have been anonymised following the data collection phase. Direct quotations presented in the findings (Chapter 4) are labelled with their participant number, which correlates with the information provided in Table 5 - Demographic information of research participants. The professional role and specific location of each participant is deliberately omitted from the quotation labels as the nature and specificity of the quotes and limited number of certain job roles in the regional medical school may compromise the anonymity of the participants when combined with this information.

- Addressing issues relating to the **disclosure of notifiable information**. All participants were made aware that I would be legally required to notify the relevant authorities in the event of disclosure of illegal activities or potential safeguarding issues.
- Issues of **lone working and personal safety** during the interview process. Lone worker procedures set in place by the university were followed throughout the data collection phase.

There were two ethical issues that demanded consideration in relation to this study, specifically:

1. Issues relating to recruitment of work colleagues as potential research participants.
2. The issues of being an 'insider researcher'. As such, there were potential issues associated with bias and confidentiality.

This research involved drawing participants from an educational programme with which I was associated, and which is offered by the educational institution where I am employed. This study therefore has some characteristics of 'insider research' (Hanson, 2013). There are advantages and disadvantages to being an insider researcher. The advantages are that I was familiar with the organisational structure and internal politics of the University and had a good level of understanding of the support structures in place and the programme the clinical teachers were teaching. The disadvantages of insider research are associated with difficulties of not exerting undue influence on participants when they are also your colleagues; this was not an issue for this study, as I did not work directly with any of the participants. Issues of anonymity and confidentiality may have arisen when presenting findings, as there was potential for individual participants to be identifiable from their quotes (Robson, 2011), so careful consideration was given to which sections of interviews could be quoted in the thesis.

3.9 Issues of trustworthiness and rigour

The nature of qualitative enquiry means that it is neither possible nor desirable to impose the same concepts of validity and reliability on the data that are applied to research undertaken within the positivist paradigm (Shenton, 2004). Nevertheless, many writers have demonstrated how qualitative researchers can incorporate measures that address issues of trustworthiness within their research (Silverman, 2015, Denzin and Lincoln, 2011). Guba (1981) sought separation from the positivist paradigm in a definitive manner by developing four criteria for researchers seeking to produce a

trustworthy study in the naturalistic domain. Here, *credibility* replaces ‘internal validity’, *transferability* addresses ‘external validity / generalisability’, *dependability* replaces ‘reliability’ and *confirmability* is considered instead of ‘objectivity’.

Each of those elements is addressed in turn in relation to the data analysis strategy of this research (see Table 7).

Strategies for Rigour (Adapted from Guba, 1981 and Shenton, 2004)		
Element	Application for Case Study	Evidence within this research
Credibility	<ol style="list-style-type: none"> 1. Adoption of well-established research methods 2. Developing an early understanding of the organisational culture in which the study takes place 3. Using tactics to help ensure honesty 4. Iterative questioning in order to uncover deliberate lies 5. Negative case analysis 6. Frequent debriefing sessions with project supervisor 7. Submitting the project to peer scrutiny 8. Detailed description of the element being studied 9. Examination of prior research to determine congruence of results 	<ol style="list-style-type: none"> 1. Case study method 2. Pre-reading of organisational documentation, and current employment status of the researcher within that organisation 3. Opportunity given for participants to refuse to take part 4. Review of answers for further exploration during interviews. 5. Differences in scripts explored in analysis and discussion 6. Regular meetings scheduled with project supervisor as per OU requirements 7. Project discussed at various in-house groups at University the participants are associated with (including the Research Management Group, the Forum for Research and at Team Meetings). 8. Full description of the case contained within the thesis. 9. Pre-reading prior to interview one.
Transferability	Providing sufficient contextual information about the project methods, participants and boundaries of the study to enable a reader to make a judgement as to the applicability of the findings to another situation.	A detailed description of the case is provided in Chapter 1 of the thesis (clinical teachers involved in the delivery of the FoCP course of an MBBS programme of a North of England medical school). The data analysis procedure is outlined in this chapter (section 3.6.3) so that the reader can

		make their own transferability judgments in an informed manner.
Dependability	<ol style="list-style-type: none"> 1. Using overlapping methods to minimise the chance that the findings are related to the manner in which the data were collected 2. Providing detail on the research design and implementation 3. Providing operational information about how the data were collected 4. Undertaking an effective appraisal of the project in relation to the effectiveness of the process of investigation 	<ol style="list-style-type: none"> 1. Interviews, and collection and exploration of institutional documents. 2. Details of the research design and implementation are provided in this chapter (sections 3.3 and 3.4). The research is of a case study design. 3. Data was collected by means of semi-structured interviews, and subsequent comparison with documentary evidence (described in section 3.5). 4. The research design was appraised, and possible limitations presented in section 6.4.
Confirmability	<ol style="list-style-type: none"> 1. Researcher acknowledges own position 2. Reflective commentary and audit trail 	<ol style="list-style-type: none"> 1. Personal perspective and previous work is discussed in section 1.3, and the position of the researcher as an insider is considered in section 3.8. 2. Steps taken in undertaking the research are provided in sections 3.3 – 3.5, and the process for data analysis outlined in section 3.6.3.

Table 7 - 'Strategies for rigour' and evidence for this thesis

3.9.1 Triangulation

Triangulation is a process used in qualitative research where multiple data sources or methods are compared and contrasted with one another in order to develop a deep understanding of the phenomenon being investigated (Patton, 1999). Denzin (1978) described four main types of triangulation, which are summarised in Figure 29.

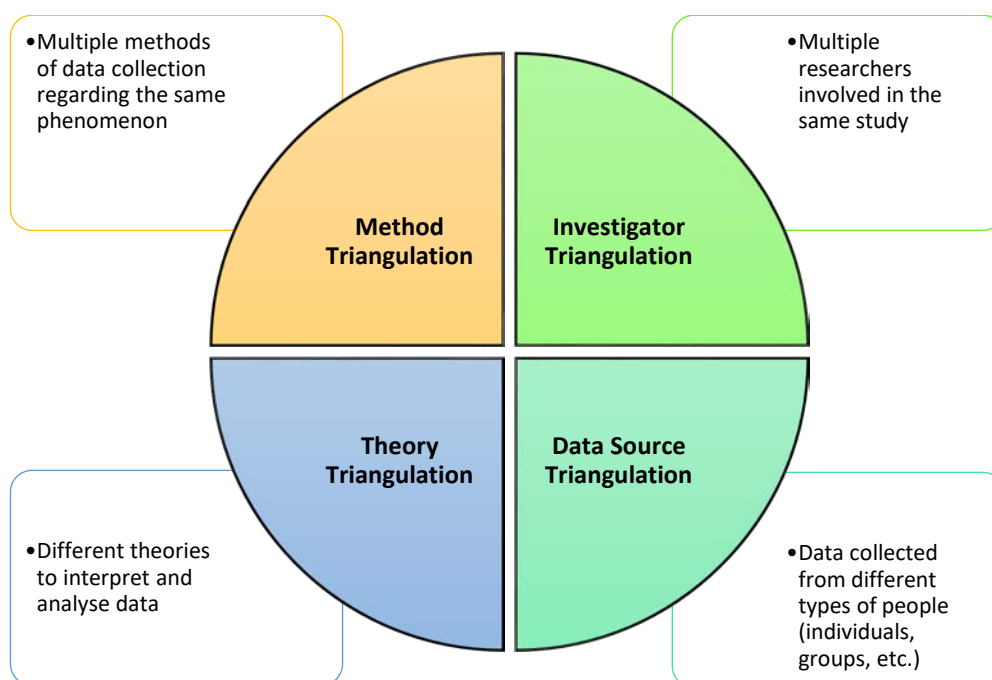


Figure 29 - Types of triangulation (adapted from Denzin, 1978)

Within this study, triangulation was achieved through the data sources, specifically drawing on the interview data and the research diary, supplemented by reference to documentation. Theory triangulation would not have been appropriate, as the purpose of this project was not to support or refute findings (Carter *et al.*, 2014). As this research was conducted as an integral part of an academic programme of study (Doctorate in Education), it would have been inappropriate to involve other researchers in any part of the data collection or analysis, thus precluding the option of employing investigator triangulation. Finally, method triangulation had originally been planned (by the use of focus groups to explore interview themes), but the short timeframe between many participants graduating from an educational programme where I taught them and then leaving the region for training posts made this unfeasible. Carter *et al* (2014) recognised that limiting study participants to only those able to participate in both methods of such a study could significantly narrow the spectrum of eligible participants.

The decision was therefore taken to use data source triangulation alongside a reflexive diary (see section 3.7) as a method of comparing multiple perspectives. Individual interviews were used to explore the perceptions of participants, which Fontana and Frey (2000) described as being one of the most powerful tools to explore topics in depth in order to gain a rich understanding. These perceptions were then read alongside the documentary sources to ascertain levels of congruence or discordance.

3.10 Chapter summary

This chapter highlighted the key decisions made regarding the methodology, design and methods of this research study. It also summarised the rationale and considerations regarding the sample constitution and size, the development of the interview schedule, data collection and analysis strategies, ethical considerations, limitations of the research and issues of trustworthiness. This information is important for future readers of the research as qualitative research requires a number of strategic choices to be made which do not conform to a set of pre-determined rules (Whittemore *et al.*, 2001). It is only by presenting clear information about the nature and rationale for decisions taken that a reader can understand the true nature of such a study.

4 Chapter 4 – Findings

4.1 Introduction

The findings presented within this chapter are broadly organised to reflect the research questions, and thus there are sections designated to clinical teacher experiences (relating to research question 1), identity (providing context and evidence of personal research questions 1 and 2) and preparation and support (relating to research question 2).

Four major emergent themes of experiences, identity, preparation, development and support, and the University perspective were identified from the data. All four major themes are presented in Table 8, which also includes a breakdown of minor themes, clusters of ideas and representative data sets.

Dominant themes	Minor themes and <i>cluster of ideas</i>	Section	Analytical sources
Experiences	Experiences of the teaching role <ul style="list-style-type: none"> • <i>Enjoyment of teaching</i> • <i>The nature of the teaching episode</i> • <i>Teaching as ‘time out’</i> • <i>Variety, unpredictability and time pressures of the teaching role</i> 	4.2.1 4.2.1.1 4.2.1.2 4.2.1.3 4.2.1.4	Interviews Interviews Interviews Interviews / documents
	Working with others <ul style="list-style-type: none"> • <i>Working with students</i> <ul style="list-style-type: none"> ○ <i>Making a difference</i> ○ <i>Building positive relationships</i> ○ <i>Respect and status</i> ○ <i>Challenge of pastoral support</i> • <i>Working with colleagues</i> <ul style="list-style-type: none"> ○ <i>Value of the educational team</i> ○ <i>Expectations and context</i> 	4.2.2 4.2.2.1 4.2.2.2	Interviews Interviews Interviews

	Confidence and capability <ul style="list-style-type: none"> <i>Differences between health disciplines</i> <i>Impact of teaching on clinical practice</i> <i>Perceived teaching capability</i> 	4.2.3 4.2.3.1 4.2.3.2 4.2.3.3	Interviews Interviews Interviews Interviews
Identity	Teaching in a clinical career	4.3.1	Interviews
	Role models <ul style="list-style-type: none"> <i>Inspirational role models</i> <i>Being a role model</i> <i>Seeking career role models</i> 	4.3.2 4.3.2.1 4.3.2.2 4.3.2.3	Interviews Interviews Interviews Interviews
Preparation, development and support	Preparation and development <ul style="list-style-type: none"> <i>Prior experience and professional background</i> <i>Preparation prior to application</i> <i>Formal induction</i> <i>In-post learning</i> <ul style="list-style-type: none"> <i>Experiences relating to innovation</i> <i>Handover</i> <i>Lack of progression opportunities</i> 	4.4.1 4.4.1.1. 4.4.1.2 4.4.1.3 4.4.1.4 4.4.1.5 4.4.1.6	Interviews Interviews Interviews Interviews Interviews Interviews
	Support <ul style="list-style-type: none"> <i>Support offered</i> <i>Support from a manager</i> <i>Support from colleagues and peers</i> <i>Support from documentation</i> <i>Support from the employer</i> <i>Support from the University</i> <i>Unmet support needs</i> 	4.4.2 4.4.2.1 4.4.2.2 4.4.2.3 4.4.2.4 4.4.2.5 4.4.2.6 4.4.2.7	Interviews Interviews Interviews Interviews / documents Interviews Interviews / documents Interviews
University perspective	University perspective on clinical teaching	4.5	Documents

Table 8 - Classification of emergent themes and analytical sources

4.2 Experiences

Within the 13 interview transcripts, there were in excess of 600 individual references to participant experiences of being a clinical teacher. Those experiences were grouped around eight themes. Six of the themes had both positive and negative aspects to them (teaching, students, personal development, job role, innovation and colleagues). The themes of confidence and capability were different, as they were only related to negative experiences. These common aspects are presented in Table 9.

Positive experience themes		Negative experience themes
Teaching	↔	Teaching
Students	↔	Students
Job role	↔	Job role
Personal development	↔	Personal development
Innovation	↔	Innovation
Colleagues	↔	Colleagues
		Confidence
		Capability

Table 9 - Common themes related to the experiences of clinical teachers

A comprehensive breakdown of all experience themes and sub-themes reported by participants is included for information in Appendix 11 – Positive and negative experience themes and sub-themes . Due to the large number of experience sub-themes, a pragmatic decision was taken to focus on the ones which were most predominant in the data.

4.2.1 Experiences of the teaching role

All participants spoke of their experiences of clinical teaching, which were generally very positive overall. The role of the clinical teacher was experienced in quite individual ways by participants, depending on factors such as the way their employer organised the role, their own professional background, their own experiences of being a student and their personal value framework.

4.2.1.1 *Enjoyment of teaching*

All participants expressed their enjoyment of teaching undergraduate medical students, including participants that had since left a clinical teaching role:

'I've enjoyed the teaching. I love it. It's the best job I've ever had. And I would tell people that - I would shout it from the rooftops, because it is'. Participant 1.

'I discovered that I really enjoyed teaching, and that was it'. Participant 5.

Personal satisfaction from teaching was reported as being comparable to seeing a patient recover and then be discharged in clinical work, but occurring more frequently in teaching than within the clinical role:

'That reward you get in clinical medicine when you make a diagnosis, or you see somebody go home that you've worked hard to get home. It's that same type of buzz, but I think you get that buzz every day in teaching. ...Those moments in clinical medicine maybe come once a month, one every few weeks? But in teaching, I feel like I get that every day; I get that job satisfaction of seeing them put it together and seeing them go on a journey'. Participant 4.

4.2.1.2 *The nature of the teaching episode*

The type of teaching session, and how that session was to be delivered had an influence on some participants' enjoyment of that session. Teaching large group sessions was something that was new to most participants and was viewed with trepidation by many. However, it was also reported as being a memorable experience once completed:

'Standing in front of 60 third years at the start of the week – [subject] week - delivering a lecture to the whole lecture room was quite interesting. First time I'd stood up in front of 60 people and delivered something - luckily, I knew what I was talking about - and I think that helped and adding anecdotal things or stories also helps because you've got some clinical experience to back up what you're saying. I'll take that with me. That experience I'll take with me'. Participant 12.

Differences in perceptions were evident between novice and expert teachers in relation to their autonomy. For seminars and small group sessions, the importance of autonomy over teaching

practice was expressed by some participants, and the more senior and experienced teachers valued their autonomy more highly than those with less experience:

‘What I don't like is feeling like I'm anything to do with sort of, 'battery hen production'. So, the prospect of teaching cohort after a cohort of students that I will never see again, the same material, to a kind of defined standard... I'd hate that’. Participant 2.

On the contrary, less experienced teachers welcomed the idea of more structure to their teaching role and a degree of pre-determined content:

‘Setting aims, outcomes... that [would be a] challenge for me because I'd have to think differently. As nurses, I think we're just ‘doers’ by nature. So, having to articulate something and break it down into chunks, and describe what you're doing, and plan what you are doing was very different for me - so it was a challenge. It's [helpful that some of that is] cascaded from the medical school - what we have to teach, and the aims and outcomes - and you've got the freedom to deliver it how you want in your class, but you're still governed by the framework and the curriculum really’. Participant 1.

The topic that teachers were involved in teaching was reported to have an impact on their level of enjoyment of teaching. Most enjoyment was reported when teachers were delivering content that had a direct relation or relevance to their own specialty or area of interest:

‘There's factors about the teaching that I really enjoy, but there's also factors relating to [being able to teach] the specialty I do’. Participant 13.

This was not always the case though. Even topics that were not necessarily ‘exciting’ or enjoyable to teachers were perceived as important if they could be directly related to the student developing as a doctor; this then superseded the teacher’s own feelings:

‘Sometimes the content isn't all that exciting but actually understanding that it's valuable to who you're teaching probably is more important to me. It's not like - let's use ECGs again - I'm not so enamoured by teaching ECGs that that's what I want to do. But understanding that's a small part of helping these people become doctors ... that's important’. Participant 9.

4.2.1.3 Teaching as 'time out'

Many participants viewed a teaching post as a temporary 'time out' in a career that would be largely clinically orientated. Teaching enabled those participants to pause and think about their next career step or to add a less stressful element to an established clinical career.

Following five years of undergraduate medical training and a further two years completing the foundation programme, many teaching fellows welcomed the opportunity to have a fixed-term one-year position where they could build relationships and have the stability of working in one department:

'The fact that it's a year-long post has been really nice... being able to stay in the one place for a year is amazing compared to foundation jobs'. Participant 7.

The opportunity to step away from a front-line clinical post was an attractive prospect for many participants, in order to dilute the impact of a stressful clinical post, or as a change to reassess and evaluate their career prior to making potentially career-defining training choices:

'I like [the] creativity that you can have with teaching and being able to escape the coal-face. Being a doctor on the ward and being part of a team and being a consultant is great, but it's relentless and... my phone could go off now and an angry family could be kicking off on the ward - and I'd have to just abandon ship. And you're always at the behest of that. ...I'd definitely encourage [prospective clinical teachers] to be able to diversify their role a bit. Because if you're just purely clinical you'll just burn out with how things are at the moment. So, I think having something to keep you sane to dilute the intensity of the front line is absolutely vital'. Participant 13.

'This is the first time that I have had the opportunity to explore my creativity and learn about yourself as well as learn about yourself as a teacher. And it's a really good opportunity to get different skills, to take a bit of a wider look and get a wider perspective on your career, on your life, what you want out of those things - and kind of reassess'. Participant 7.

However, the break from clinical practice was not without negative consequences. The prospect of returning to a clinical role made many participants apprehensive, particularly those early-career teaching fellows who had held a 100% teaching role with no clinical component:

'Taking a year out of doing proper clinical work. Going back in, I'm quite apprehensive about it - because I feel a bit deskilled and a bit out of touch. And you get used to a different lifestyle, and it's quite difficult going back in to being purely clinical'. Participant 6.

4.2.1.4 Variety, unpredictability and time pressures of the teaching role

The variety of a teaching role was a clear benefit to participants, particularly when contrasted with a concurrent clinical position:

'I like the variety. Because it's not it's not set... there's always something different. Every day you're doing something different, and I enjoy that'. Participant 10.

This variety did have consequences in some cases, with some participants feeling that the teaching role was unpredictable at times. In some cases, teachers were obliged to 'fill in' for absent colleagues whenever necessary, or adapt their practice as their role was developed or changed:

'I can come in, and I can have a day planned - and then somebody knocks at the door and says 'this tutor hasn't turned up and I've got 30 odd students sitting here waiting for this session. Will you step in and do something?' I can't always deliver if it's a speciality, but I have to think on my feet and deliver something that they can relate to, and that's related to the outcomes'. Participant 1.

Prior to the commencement of their teaching roles, all participants had underestimated the amount of non-teaching responsibilities that the role entailed. This included things such as answering emails, organisational responsibilities and more general 'paperwork'. This was equally prevalent in those teachers that had researched the role carefully before applying, compared to those that had not:

'What I was not prepared for - or did not envisage - is the amount of admin and preparation, and everything that goes on behind the scenes. I think students don't realise how much work goes on behind the scenes - and I certainly didn't'. Participant 7.

'What I hadn't anticipated was all the preparation for the teaching, the setting up of classrooms with clinical equipment, recruiting patients, consenting patients... just looking after patients in the department, or volunteers. I didn't... it seemed quite separate from the actual teaching, it's not what you first think about as teaching - you just think about standing

there delivering something - and it was all the planning and organisation and development that I just... it hadn't occurred to me until I started the job'. Participant 1.

'I just thought that it would be a question of standing up and delivering - and it just isn't. And I suppose that - I've talked about this the other day - I suppose my perception was totally wrong'. Participant 9.

Many participants expressed that the time available for teaching was too limited for the responsibilities they had, or that they were unsure of what the formal allocation of time was for teaching. There was also the belief that as clinical roles are becoming busier, time for teaching must be formally allocated:

'The clinical pressures are such now, that we can no longer work on the model that worked perfectly well for over a century of just 'fitting students in around the edges'. Just taking them along. Because everybody is running around like crazy all the time, and there isn't the space in the day to teach in the gaps anymore. So, you've got to pay people for clinical time. It's sad that it's gone that way. But, that's the reality'. Participant 5.

4.2.2 Working with others

Working relationships with both students and colleagues was discussed by each participant in great depth. Although the experiences recounted were generally positive, there were some participants who expressed deep dissatisfaction and unease at the way some of their own working relationships had developed. However, regardless of the degree of positivity they felt regarding their own experiences, all participants regarded supportive and mutually respectful relationships with both students, teacher peers and line managers as being their aspiration.

4.2.2.1 Experience of working with students

All participants were keen to share their experiences of working with students, whatever the nature of those experiences. Of all these themes identified, working with students was the one that was most strongly articulated by the participants. Even those teachers who had experienced some negative student reactions were also able to share positive encounters, and no participant expressed working with students as an overall negative aspect of the role.

4.2.2.1.1 Making a difference

All participants reported that the concept of 'making a difference' was an important and motivational factor which underpinned their teaching practice:

'I've loved the teaching. I think there's great rewards when you watch students, especially when they come in FoCP and they've had their two university years and they move through the first 10 weeks and then suddenly they hit the wards at the last five weeks - and you see that change in them'. Participant 1.

Three participants remarked on the sense of reward when former students returned to the hospital as qualified doctors:

'But you get to see a finished product when the doctors come back. When the students come back as doctors - that's very satisfying'. Participant 11.

4.2.2.1.2 Building positive relationships

Most participants commented on the nature of the relationships developed with students during their teaching. One participant had been particularly moved by the reciprocal nature of the supportive relationship established with one particular seminar group:

'[One particular student seminar group] would always say 'how are you?'. And I was so touched by that. That's an unusual relationship to have. So, I think I like it when these kinds of groups are like a family, and it's not one person doing all the deciding direction, that information doesn't all flow in one direction. The care isn't all in one direction'. Participant 2.

Another participant explained how they had not anticipated the intensity of the relationships developed with their students:

'I didn't think I'd be as invested in the students as I was. I suspect it's a bit short sighted of me to not realise I would be'. Participant 9.

4.2.2.1.3 Respect and status

The issue of respect and perceived 'lower status' of non-medically trained clinical teachers by students was raised by every participant from a non-medical background. Some participants attributed the lack of students' confidence in their ability to teach them to their non-medical background:

'I can see if you're training to be a doctor, you want to be taught by a doctor. So maybe we just need to instil the values of the whole multi-disciplinary team to medical students, and the value of that team as well. We have different values, I think'. Participant 1.

The importance of the visibility of 'teachers from professions other than medicine' by students was cited as necessary for acceptance by students by both participants from a nursing background:

'I think it's changed over time in that I think we're quite well respected, I would say that. Whether that has changed or not I don't know to be honest - we probably... probably always have been or the more that there are of us, they're more accepting of us. So, I possibly thought that the students wouldn't be terribly accepting of [a non-medically trained teacher] teaching them. And there has been the odd one, but then they're also - in my experience - those odd ones wouldn't be happy with anything bar a consultant. But I think on the whole the medical students are really accepting of getting taught by a range of different people'. Participant 3.

A perceived lack of respect was not limited to front line teaching staff, but was also reported as being evident in student interactions with administrative staff:

'[Students] can be nicey nicey when the doctors are around, [but] when they're going to the admin office, sometimes they come in and the way they speak to [the administrative staff] is shocking'. Participant 11.

Another example of lack of professional respect was offered by one participant in relation to the written student feedback that is submitted by students at the end of every rotation:

'[Students] can be quite personal to people's characters. Like they'll say Consultant X - sometimes he's quite boring or he's quite monotone, and sometimes it can become a personal attack. And they don't mean it to be, but I think it can get quite personal'. Participant 4.

The issue of status (as opposed to respect) was also articulated by some early-career participants from medical backgrounds who were working as teaching fellows, but this was perceived as being of benefit to them as 'near-peers' of students:

'I am a near-peer, whereas the consultant isn't a near peer and therefore [the students] were more happy to discuss [negative feedback] with me'. Participant 12.

Some participants who had many years of clinical teaching experience remarked that the expectations of students had increased in recent years, and accordingly the nature of the student-teacher relationship had altered:

'I think there is certainly an element of the students becoming a little bit more demanding. I think back to when I was a student, and the sort of the pedestal I had the teaching fellows on. I don't think I would have challenged them. I think we all were slightly in awe of their seniority. And I'm not saying that's a good thing - hierarchy in medicine is fraught with potential problems. I think even ten years down the line I think, students maybe aren't quite as respectful sometimes. I'm not saying I want them all to be lined up in lines and saluting or anything like that - that's clearly not what I want. I don't know whether it comes with just the shift of emphasis of tuition fees maybe? I mean you're paying so much money these days, you're naturally probably thinking 'well, am I getting value for money?' or 'I don't think this teaching fellow's telling me the right thing', or 'I'm going to challenge them on this'. And I just wonder if that's changing the dynamic maybe of the student-teacher relationship. Even though I was paying tuition fees when I was a student, I still just felt incredibly grateful for any teaching that could be provided at all. And I was like 'I'm so sorry to bother you let me go and hide in the library, like you're far too important to be interfering with', and it doesn't really feel like that's the way anymore. Participant 13.

4.2.2.1.4 Challenge of pastoral support

Issues of pastoral support and working with students with personal issues was universally reported as being the most challenging aspect of the clinical teacher role, by both participants who were medically trained and those from a nursing background:

'Pastoral issues with students were really challenging. If you're [a] GP and you're not sure about something, you send them into A&E. At 5 o'clock on a Friday, when a student comes up to you and tells that they've got quite a big problem - you're like 'well this isn't the same for

clinical. I can't just admit them to hospital! How am I going to navigate this and how am I going to support them?'. Participant 4.

4.2.2.2 Experiences of working with colleagues

All participants noted the importance and value of clinical teachers working with colleagues as part of a broader educational team. This belief was independent of their experience to some extent, as even those participants who gave examples of colleague relationships that had been difficult still wanted to find more positive connections in the future. No participant stated that they would like to work on their own.

4.2.2.2.1 The value of the educational team

All participants were in agreement that being part of an educational team was one of the most positive aspects of clinical teaching and was most pronounced in the teaching fellow participants (participants 4, 6 -9 and 12). Although all participants valued their team, the teaching fellows tended to work as part of a group with shared responsibilities. The nature of the educational team was perceived differently to more clinical teams:

'I like the team. I like that we are a big team. And I've never felt as happy and as supported in the team as I do in education. I think it's a very, very different environment [to clinical work]'. Participant 4.

In addition to being valued, the teaching team appeared to share a similar set of values. This was discussed by some participants who had a desire to become part of a different community to their established clinical community. These participants viewed the teaching community as a friendlier and less competitive environment than the clinical community that they had experienced, and felt a keener sense of 'shared values' amongst fellow teachers:

'I felt like I found my people. People who were interested in more than just making money and getting people out the door, feeling like I was part of something bigger. I loved being part of the university. I loved working there. I loved walking through the quadrangle and feeling like somehow, I was part of that. I loved the discussions where we would throw around ideas about what we could do and how we could make [teaching better] so that we really make the best future doctors. There was a lot about it that I loved'. Participant 5.

'I think it takes you into a friendlier world. So, the world of educators - people collaborate to make good teaching together - whereas people in the same specialty will compete to be the best at that specialty. I don't think it's competitive in the same way. And I'm sure if you move into academic medical education it becomes a different thing and brings some of the worst elements of competitiveness. [The clinical community offers] variety, renewal, a freshening function and broadening your sphere - and a different team with a different feel'. Participant 2.

'We as a group of teaching fellows get on, not just get on really well socially. I've never worked with such people. [They are] people who are so nice but also so thoughtful about what they're doing, and just really care about what they're doing. And I don't know where they all came from, but they are absolutely brilliant people'. Participant 9.

'I can't think of any unpleasant people in the department. And I think that's one of the nice things about education; the rogue characters of medicine don't tend to gravitate towards education, it tends to be nice people. Nasty teachers... there are some I'm sure, but it's just a friendly environment'. Participant 13.

Hierarchy was an issue that was raised by some participants, who felt that it was particularly important that all staff were valued in their own rights, regardless of their rank and seniority.

'Here [at this hospital] the hierarchies are very much flattened. And I think you can see that on our away day that we have every year. So, you have consultants, you have teaching fellows, you have nurse teaching fellows, you have the admin staff - all coming together and doing the same kind of sessions together, having the social side of things together. And when I came to that before starting this job, I couldn't pick out who was a member of admin staff, who was a consultant. Being completely new to the Trust, I didn't know who anybody was. And I felt that was really nice'. Participant 7.

4.2.2.2.2 Expectations and context

Many participants discussed their lack of familiarity with the teaching context, and how this was difficult in relation to their own perceptions of whether they were doing a good job. The role of more experienced colleagues (both teachers and administrative staff) was perceived as valuable in this regard, as they would have experience of how other teachers had been received by students in a particular session:

'I taught x-rays at 4 o'clock on a Friday after their first week of FoCP. I remember dimming the lights, and literally watching them fall asleep was quite disheartening in your first week. And actually, just being able to come out and laugh with [administrative staff], saying 'I didn't do that well'. But they just weren't having it. Like 'yes, I didn't teach that session well, but I don't think any session would have gone that well'. So, I can't blame myself too much. Having that safety made such a big difference, because they just laughed and went 'yeah someone has to get the Friday 4 o'clock last first week of FoCP shift'. And it gives you comfort that you're not alone in having a bad session. It happens to all teachers'. Participant 9.

The expectations of a clinical teacher were not always clear to participants, with many learning 'on the job' after starting their teaching post with blank diaries. Although most participants quickly developed a shared understanding with supportive management and colleagues, other participants encountered a lack of managerial guidance that they found challenging:

'I needed proper line management, with somebody who actually spoke to me more than once a year and would just have a conversation every so often about how things are going'.

Participant 5.

'Half the battle, why it took us so long to feel comfortable in this role, was because nobody actually said you're doing it right. Honestly. Because we're down here and [supporting] everyone else'. Participant 11.

4.2.3 Confidence and capability

Confidence as a teacher was reported by many participants as being an issue (either currently or on commencement of a teaching post) and was expressed both as an internal generalised lack of confidence or relating specifically to particular teaching tasks.

4.2.3.1 Differences between health disciplines

Teaching undergraduate medical students in relation to specific areas of practice that the teacher was skilled in was challenging for some participants with a non-medical background, who were initially unsure about how topics may need to differ between professions:

'For some of the nurses - some of the newer ones - they have come in and been scared to deliver just basic stuff - like catheterisations, a nurse's bread-and-butter - because at a

medical level it's very, very different'. No - this is clinical medicine, and it's a clinical skill you're teaching them, and you just teach them what you know. So, I suspect they feel very much the same as I did in the beginning'. Participant 1.

Lack of self-confidence was another area about which the non-medically trained teachers expressed difficulties. This often related to their own perceived professional status compared to that of doctors:

'My first impressions [of teaching medical students] were 'oh my God what have I done, I'm never going to be able to do this'. I learned an awful lot about medical training that I hadn't ever appreciated before. So, I took on a whole new appreciation of medical people. But I think the main thing that I felt was 'oh my God I will never know everything there is to know to be able to teach these people'. And I don't feel that now, because I don't think I need to know everything'. Participant 3.

'I felt as if I was like a rabbit in the headlights when I came. And at one point I thought – 'I can't do this, this is too... I'm not going to be able to do it'. I didn't think I was good enough'. Participant 10.

4.2.3.2 Impact of teaching on clinical practice

Participants recognised that teaching had expanded their scope of practice as a clinician, by highlighting an aspect of a medical career that they might not have formerly known about or considered:

'[Teaching has been] a nice sidestep. I think it's just shown me a different side to being a doctor - rather than just being purely clinical - there's this whole other side of education, which I didn't really think about or know much about'. Participant 6.

Teaching was recognised as having a positive impact on other clinical aspects of participants' job roles, in terms of renewed interest, enthusiasm and confidence:

'I think it brings a kind of freshness to your clinical practice. It has a kind of ecological 'sharpening the sword' type component to it. So just teaching - so if you're getting bored of Cardiology - then teaching cardiology will make you a better or more enthusiastic cardiologist again I think. So, there's a sort of self-renewal thing, definitely variety'. Participant 2.

While success in a teaching role was associated with benefits to clinical practice, the reverse was also true. One participant articulated a difficult experience where several problems encountered in the teaching element of their role affected their clinical confidence:

'I just had a catastrophic loss of confidence. And the one thing you need as a [clinician] is confidence, because you're making rapid clinical decisions all the time. And you're managing a lot of uncertainty and every single case you could get it wrong and someone could get hurt or die - and you live with that the whole time. ...It's this voice in your head - saying 'yeah, you're just not tough enough – but everyone else is.' Participant 5.

4.2.3.3 Perceived teaching capability

One medically trained senior teacher raised the issue of non-medically trained teachers being capable of educating undergraduate medical students:

'I'm not going to say - in a sort of politically correct way - that I'm a wholehearted fan and you can take nurses and they can educate - 'it's just about the title' - and they could do any of it. I don't think they can do all of it. Some of them can do all of it, it is down to the individual practitioner. But it is potentially - if you get somebody who's going into that role because they're trying to get away from clinical practice, or because they have a perception that it is easy - you could really have an unhappy experience'. Participant 2.

A non-medically trained teacher who shared their view of the impact that a nursing background had made on a particular teaching session echoed this experience:

The first time I cried was doing cardiovascular examination - it was heart murmur patients. So, I'd listened to a million and one hearts as a nurse practitioner. I'd picked up heart murmurs a lot. What I found difficult was to decide what they were - based on the clinical findings. I'd never really been taught that, because as a nurse practitioner you pick it up and you pass it on - you get them a scan, you get them an echo. Whereas here, it was more about diagnosing, 'yes, I've heard it, and what is it?' So, I was being asked questions that I couldn't answer, and then [a senior doctor] came in and stood and watched me - and only just to join the group, not to actually check I was doing things all right - but that's kind of how it felt. And I answered a question that was wrong, and he corrected it. And I just got really upset'. Participant 3.

However, this was not a unilateral phenomenon. Lack of confidence in their teaching capability was expressed by some participants who described feeling like an imposter in the educational setting:

'There was this really competitive field of people [who had applied for the teaching fellow post] that I knew very well and who are very good at what they did. And then when I got the job... it set up a feeling of this imposter syndrome. Like, 'why did you hire me? Are you sure you meant to hire me? Look at all these people. I know them really well, they're brilliant'.

Participant 9.

'It's a worry that you are not going to know the answers to questions, or you're going to be 'found out' for want of a better word, that you're an imposter - that you shouldn't know all this stuff. And I am not a terribly confident person, so I don't think that I have got that confidence. Maybe I just haven't got that insight! (laughs) and other people have! But I definitely think that people are very much that 'oh no, they might find me out, that actually I don't know that'. Participant 3.

'I think it's very important that [clinical teachers] retain a foot in [clinical practice], that they still have a professional identity and that they're still developing and practicing. I think that you're too much at risk of the 'impostor syndrome', because in the back of your mind you know you're not practicing, and you're spending your whole time fighting for credibility. Both for yourself - I think convincing yourself that you are legitimate - and convincing the medical students'. Participant 2.

4.3 Identity

Of the 13 participants, just over half talked about their professional identity. For some this appeared to be of particular importance, since they made several references to different aspects of identity within their interviews. The broad category of identity had two very clear sub-sections within the interviews; potential role conflict of being a teacher and a clinician at the same time while maintaining balance, and the importance of role models in regard to influential teaching role models, the importance of being a good role model to students and seeking out aspirational career role models to inform their own career path.

4.3.1 Teaching in a clinical career

All participants who talked about identity expressed a degree of ‘moving between roles’ of a doctor / health professional and a teacher, but this was linked to the predominant role which they were fulfilling at the time, and the nature of the teaching:

‘I think that they [the roles of teacher and doctor] are completely interlinked, so I think it's quite hard to separate them. Because I think for a lot of your teaching, you're very aware that you're a doctor - and therefore students are looking at you as who they potentially might want to become. And so particularly when you're teaching bedside teaching, you're very much expressing yourself as a doctor. But in terms of time, I've definitely felt more like a clinical teacher first and a doctor second in that the majority of my time has been spent teaching rather than providing clinical care’. Participant 6.

The participants generally described identity as being fluid in nature, and changeable – dependent on the dominant role being fulfilled at the time:

‘I'm not sure if it's something that just evolves to be honest. Initially I was a doctor, and then I was a doctor who did a bit of teaching whenever I could find the time. Now I see myself as more of a teacher who doctors - but I'm going back into [specialist] training so I'm going to become more of a doctor who teaches. So, I think it's fluid dependent on - especially for somebody who's in training and who might be in quite different posts in different times - I think it's probably fluid until you get settled on a consultant job’. Participant 7.

For participants that had a split role (i.e. teaching fellows with a shared teaching and clinical responsibility) this was less polarised than for participants with a 100% teaching role, as there was no ‘doctoring’ in their day job, so the role of teacher was adopted more readily:

‘[I feel like a teacher rather than a doctor]. I don't do it, I don't see patients so I don't see how I could call myself a practicing doctor at the moment. And in fact, if I explain my job to people who aren't... who don't understand medicine, I say I'm a doctor but I'm not currently doing any clinical practice because I'm not. That's just totally a fact. So, I very much feel like I'm being... sort of integrated into education this year rather than doing anything else, so it's been really nice’. Participant 9.

Once the teaching role had been cultivated, this participant went on to discuss the future potential of

this other identity, a 'fall-back position' in the case of not wishing to continue a clinical career:

'And not being a doctor for a year - as I'm going to call it - has been incredibly useful because it's so reassuring to know that for any reason in this horribly turbulent political environment if medicine doesn't work out... yes, I might not go off and actually be a teacher, but I can do other stuff'. Participant 9.

This 'teaching as a back-up career option' was echoed by other participants:

'I loved [my former clinical] job, but I found it very challenging because of the type of patients they were, and I knew it was never going to be long term. Because I don't think I could - later on in life - physically do it. And then the opportunity came for this role [so] I went for it'. Participant 10.

'I've certainly thought about doing things outside medicine'. Participant 9.

The role of 'teacher' was not a finite one, however. One participant explained how further educational study had helped to develop them as a facilitator:

'I think doing the certificate at the same time [as holding a teaching role] is really useful - because it makes you look at things differently. And I think the [post-graduate] certificate [in medical education] was a big learning curve for the shift in how I saw myself - from a teacher to a facilitator I think'. Participant 4.

Some participants revealed a long-held ambition to teach, that in some cases pre-dated their clinical career:

'My ambition was always to teach eventually. That's kind of borne out of the fact that I probably didn't do the correct job in the first place, and that I chose unwisely. So, I always thought that my long-term goal was to get into teaching... it was something that I've always wanted to do'. Participant 3.

'I think I'd always wanted to have some sort of involvement with teaching and I'd always been keen to help to teach during F1 and F2'. Participant 12.

In terms of credibility, there was a strong feeling that clinical teachers needed to retain an element of clinical practice to their roles going forward, regardless of whether that was in a medical or other

health professional capacity:

'I think what works for me - and in terms of my credibility with the students - is that I do maintain my clinical practice. So quite often when they go on to the wards in the last five weeks of FoCP, I'm out there on the wards working as well. So, they encounter me on the wards, and what I do on the wards as well'. Participant 1.

'I don't think I can teach and not be clinical. I think that's detrimental. I think everything changes so fast in medicine, and my stories that I'll tell now are like two years old. I'll go 'I remember when I was in A&E...' and for me, I was like 'I need some new stories! I need to go back'. Participant 4.

Regardless of clinical profession, the priority of the patient over teaching responsibilities was universal with participants:

'We remind everyone that our volunteer patients are people and not commodities - ensuring breaks -toilet and beverages. Just because a Doctor can work without a break that does not mean they should, or that they should expect patients to'. Participant 11.

The value of a supportive healthcare institution, medical school, educational community and local colleagues was clearly evident from the interviews, but these elements will be addressed specifically in the analysis of 'support' in section 4.4.1.6.

4.3.2 Role models

The perceived value and function of role models emerged as a distinct theme. Within that broad theme, three sub-themes were identified. The latter related to the importance of positive teaching role models as a student, the experience of being a role model, and the value of having career role models to aspire to.

4.3.2.1 Inspirational role models

Some participants discussed role models that had proved extremely influential, and whose ethos they had modelled their own careers on:

'Some of the teaching I had when I was a third year, I can still remember it now actually. The seminar stuff, the small group stuff, with [specialty the participant pursued]. I'm not quite sure what it was about it, but... they just had a much more approachable manner. You didn't feel like they were pontificating from on high, it felt like you were just having a chat with them and they seemed a bit more accessible'. Participant 13.

'[I remember a colleague] who had more influence on me than anybody else really. He was extremely humane, very bright. He had become very empathic - though it wasn't his natural way - and he was very un-arrogant, although he was the best [specialist] I ever knew'.

Participant 2.

'[Some of my final year teachers] were knowledgeable and experienced and they were supportive - but also challenging. So, you felt comfortable asking questions to them - even if you felt like it was a silly question. But you couldn't rest on your laurels, they would expect you to work hard and try your best and things. And they'd also push you, and I really value that in a teacher - and that's what I try to emulate as a teacher. I really value it when somebody is kind of firm but fair and supportive, but they do challenge you - and they push you and expect you to meet a certain standard'. Participant 7.

It was interesting to note the warmth with which these participants spoke of these particular role models. They smiled throughout these sections of the interviews and became more animated in their tone of voice and body language. The short excerpts above belie the depth of recollections expressed by both participants, who spoke at length about the influence these teachers had had on their own career path and specialty choice.

'There are some [career role models that I have] but they've... they've grown very different job plans that have taken them.... they're many years down the line from where I am. So, I see what those jobs look like. Whether they'll be deliverable for my specialism I don't know, but there are some people that I can see, and I think 'okay that might be where we're headed'.

Participant 13.

'It was really nice to get to know [senior colleagues] as people, find out a bit about their career paths... It's quite reassuring to know that they were not intending to go straight onto specialty training'. Participant 9.

4.3.2.2 *Being a role model*

The desire to emulate their own role models was cited by three participants as the main reason for seeking an educational role.

'I have very positive memories of the teaching fellows [who taught me] of being supportive... They delivered a lot of sessions - but actually just being there to give you that nod in the corridor and go, 'yeah, okay you're getting there it's going to be alright, we've been... etc. etc'. That relationship aspect that felt very appropriate but very supportive, felt like something I wanted to try and model'. Participant 9

'There were a few teachers involved in my teaching as a final year who I thought were really good and really useful - and they were role models I guess looking back on it - and I perhaps wanted to be a bit like them'. Participant 7.

One participant in particular reflected heavily on the way they perceived role modelling as being incumbent upon clinical teachers, and necessary to produce foundation doctors who are able to fulfil the responsibilities of their own role:

'And I think your job as a teacher is not purely about delivering that knowledge - it's acting as a role model and nurturing them from that perspective as well. Because you can give them all the clinical knowledge in the world, but if they don't have that... sensitivity, and they're not sensible - they don't have those professional values - then you're not going to do well as a doctor I think. You're not going to be necessarily respected. And not just about respect, but you might not perform well enough as a doctor'. Participant 8.

4.3.2.3 *Seeking career role models*

Once in an educational post, concern was expressed by four of the medically trained participants that there were no clear career pathways or role models for them to envisage what their progression in an educational career might look like:

'There aren't any [other members of staff sharing the same specialty] that work here, in my workplace to kind of look up to. They're all hospital consultants. Which is great, and there's lots that you can learn from that as well, and there's loads of inspiring people here. But I

guess it would be nice to have somebody who you could look up to or even chat about how to continue integrating medical education in a career in [my specialty]’. Participant 7.

For some participants, there was an additional challenge and conflict, as the specialties in which they had secured training positions were (historically) not involved directly in the teaching of undergraduate medical students:

‘So as a practical point teaching in [my specialty] isn't really a thing. [These specialists] don't, you know, really traditionally take that big a role in undergraduate medical education. But that was something I'm actually quite interested in. So why does that not happen, and how much does that feed in to undergraduates not wanting to be [part of that specialty] because they're not visible?’. Participant 9.

Another potential barrier for some participants was the ‘gap’ between where they were as a teacher at the point of their interview and the potential role they might wish to inhabit in the future. For many, it could be well into the future and entail diverse pathways, with no guarantee of reaching their desired position:

‘There are some other [people in a similar job role] who are [in my specialism] but they've... they've kind of grown very different job plans that have taken them.... you know, they're many years down the line from where I am. So, I kind of see what those jobs look a bit like. Whether they'll be deliverable for my specialism I don't know, but there are some people that I can see that... and I think - 'okay that might be where we're headed'. But we'll see’.
Participant 13.

‘The problem is that I'm going to be going into core medical training, and then specialty training - and there isn't really any allowance for having teaching as part of your training. So really, it would be more looking ahead to being a consultant - how you can integrate [a teaching role]’. Participant 6.

4.4 Preparation, development and support of clinical teachers

Although there is some potential cross-over between preparation for a clinical teaching role, the individual support teachers receive and professional development opportunities, participants presented a distinctly separate definition of how they viewed ‘preparation’ as opposed to ‘support’ and ‘development’. As such, each of these definitions are explored separately within this section.

Participants defined *preparation* as occurring in a prospective way in order to prepare them for the broad role of a clinical teacher, and primarily being delivered formally by either or both the NHS employer and the university prior to commencement. Conversely, *support* was regarded as occurring once the participant was in post, and encompassed more specific guidance related to either work-related tasks or personal pastoral support from peers, managers or university staff. Support activities were almost universally regarded as being 1-1, rather than formally delivered programmes. Formal programmes of staff development, or higher qualifications (such as the masters in medical education) were regarded as *development* activities, which would add to the skill and have potential career impact for the participants. All 13 participants described support in all three of these phases, but with differing degrees of emphasis in each case.

4.4.1 Preparation and development

The subject of preparation for the clinical teacher role was discussed by 12 participants and featured heavily in the areas they wished to discuss. While preparation for the role *prior* to commencement in post had not been considered during the early phases of this research, it appeared strongly in the data. Formal induction training (offered at the start of their clinical teacher role by the University) was discussed by nine participants. Preparation achieved ‘on the job’ was discussed by twelve participants. The concept of preparation extended before the induction to prior experience. This ranged from prior experience of the programme from a student perspective to no experience of a medical curriculum at all, to researching the role prior to application by speaking to a current or past post holder. There was also extension beyond ‘in-post’ learning to handover – where teaching fellows on one year fixed-term contracts described the development of handover documents and procedures for their successors.

4.4.1.1 Prior experience and professional background

Most of the medically trained participants (seven out of nine) in this study were trained at the case study university as an undergraduate. This meant that they were not only familiar with the subject content, but also the delivery style and organisation of the MBBS programme:

‘So [as an] undergraduate I was at [case study university] and I trained... actually, I trained in this Trust. So, I've been a doctor now five years, but I haven't left [the current Trust]! So yes, I think it's time to leave but I'm [current trust] trained through and through’. Participant 4.

'So, the curriculum where it is now currently is probably similar to the one that I was involved in [as an undergraduate medical student at this university]'. Participant 12.

'I've kind of come through the [case study university] programme - I know what all the rotations are about, the LTC is what used to be CIDR for me, but it's essentially the same. So, I'm well orientated from that perspective. For the other one or two who have come from outside of [this] university I think for them it's quite hard to get their head around to begin with - what all the different rotations are, what they mean, where they sit. So, I think it takes a bit of time for them to learn that side of things'. Participant 8.

'I think I think I'm quite lucky because I was a [case study university] graduate, I trained up here as a junior doctor, I taught as a teaching fellow and I'm now a consultant, so I kind of know the curriculum, I know the base units, it's all just sort of drilled into me'. Participant 13.

This was not the case for graduates from the nursing profession (two in this study) working as clinical teachers. As these teachers had no experience of undertaking an MBBS curriculum as a student, there was an appreciation that there would be inter-professional differences in subject content and ethos that would require alignment to their own skills, and this produced some anxiety:

'I found [teaching medical students] a bit daunting - I didn't think I could do it, but at that time the job was very different. It was very much delivering the clinical skills that I did as a nurse, and some basic classroom teaching. But they were all revolved around the work that I did as a nurse really, delivering those clinical skills'. Participant 1.

'I think you couldn't possibly know what you were going to from a completely different job in to clinical teaching, because you've got no experience of the actual people that you teach and so unlike teaching nurses - at least you've been through that part of it, you've done that on a daily basis, and the medical clinical teachers here have been through med school and understand that - whereas you're coming from a completely different viewpoint and job. So, I don't think you could ever be properly prepared for what the differences are'. Participant 3.

This lack of insight into the specific nature of the teaching role was further amplified for the two HCA teachers in the study, who noted that as their roles were relatively new, they had quickly evolved from the initial iteration:

'[It is difficult to know all] that you need to know, to be honest it's more like you learn as you go, because as much as people tell you what your role is, the role has developed so much. My role isn't what I started out as'. Participant 11.

Those non-clinician participants held a teaching role which was different to that of the participants coming from clinical backgrounds. Their role was to support their clinical colleagues rather than to design and deliver teaching sessions of their own:

'We recruit volunteers to come in, we recruit volunteers from the wards. Sometimes the volunteers - when they're coming in from home, we're meeting and greeting them on the day. One might cancel, one might take poorly, the doctor might change their teaching - and you have to run with it and you have to adapt with it. If someone isn't coming in, you make sure everyone's safe and usually, you're the one running to the ward to try and get somebody who's stable enough to come up and help with the teaching - or just to pass that time until whatever's been rearranged is getting arranged. So, you have to be quick on your feet - quick thinking but also quick to grab anything that they may change, that they need. You know, plans do change - you might need equipment, you might need somebody else. And so, what you've got figured out, your plan for the day might totally change, but you have to be good like that'. Participant 11.

'What we do is we liaise with doctors. Whoever leads with teaching sessions, they let us know what particular patient's they need, so we go out looking for these types of patients and we bring them in - If there's teaching sessions in the hospital - in classrooms, for round robins or... whether it's doctors themselves that go on the wards with the students. So, our main part of our job is recruiting patients for teaching sessions for medical students'. Participant 10.

An additional challenge for the non-medically qualified teachers was that once in post, they were working in teams where they were usually the only non-medically qualified clinical teacher, and medically trained colleagues did not understand the scope of their practice or expertise:

'The doctors often talk to you like you know exactly what they're talking about, you know it goes [straight over your head]. And you're saying 'right, right... and in simple terms I'm looking for?'. This or this. 'Right, that's all right. What am I asking for, how do you spell that long, humungous word' (that rolls off their tongue) and I'm asking [my line manager] how do I say that?' or you go to one of the docs who you know'. Participant 11.

Negative reactions from students to the involvement of non-medically trained clinical teachers was expressed by all four non-medically trained participants, with a particularly vivid example given by one participant:

'[I had] an experience with a student who... the session was going really really, really well, until one student asked what my background was - and then when I told them it was [not a medical] background, you could just see their body language, the whole atmosphere changed. And one student actually just slid into his chair and closed his eyes. So, I said 'if you're tired you can go to the coffee room and have a sleep!' [laughs]. And he kind of switched off in all my sessions after that'. Participant 1.

The problem of medically trained teachers not understanding the potential impact of their actions regarding this perceived lack of credibility of their non-medically trained colleagues was highlighted by one of the participants from a nursing background:

'I answered a question that was wrong, and [a passing consultant] corrected it. And I just got really upset. Not with him - just got really upset and left, and cried and cried and cried. So, there was a few times that happened - that was the only time I cried - but there's a few times that that actually happened. And that was the only time a consultant came in. But you're still... you're very exposed when you don't know the answers to stuff. Whereas now - as I say - I'm more comfortable, I don't know'. Participant 3.

However, this was not universal as the potential 'credibility issue' was also recognised by one of the medically qualified clinical teachers:

'So, what do I think about [non-medical] educators? I think it's very important that they retain a foot in [their profession], that they still have a professional identity and that they're still developing and practicing. I wouldn't encourage somebody at [an early] stage in their career to drop practice and take up education because in the back of your mind you know you're not practicing, and you're spending your whole time fighting for credibility. Both for yourself - I think convincing yourself that you are legitimate - and convincing the medical students. And some of the medical students can be [quite difficult], and they will try to say, 'what can you teach me, because you're [not a doctor]. And I think to be able to handle that you've got to really, really believe that you are legitimately in that role'. Participant 2.

4.4.1.2 Preparation prior to application

Of the nine medically-trained participants, all had sought or gained information regarding the role of a clinical teacher prior to their application. For most, this included their own experience of the teaching fellow role from their time as a student. However, those observations did not necessarily reflect the reality of the role:

'I think I assumed that [teaching fellows] just turned up and delivered teaching that was already organised, and they literally just parachuted in and did a session that maybe the university had written for them, or... and they were just the kind of the people who relayed that'. Participant 13.

'Well from my personal experience as a student - like, you cannot assume for all students - but I feel that you have a very, quite a narrow perspective and you don't realise actually what goes on outside of these people - these doctors on the wards - what else they do. I think you have quite a narrow perspective and actually it's only when you start working as an F1 do you realise actually, all these different people and all their roles and remits, and... So, no, I don't think I would have realised what's... I kind of just... They just turned up for some bedside teaching, I did it with them and I said 'bye bye'. Participant 8.

'Say they took us for a two-hour seminar in the morning, and we'd be like 'what are you up to?' - because we did chat, you know, what are you up to for the rest of the day - probably say something like 'oh we've gone off to do some planning'. Like I knew they were in the office, I knew where... but I didn't really know what they were doing'. Participant 9.

Some participants spoke to existing or former post-holders to gain a better understanding of the job role, which was generally regarded as being extremely valuable.

'I'd been told what that job was like, what it was about, I'd discussed it with the previous teaching fellow before I applied. And so, it pretty much hit what the job was advertised as, what I was told it was going to be and how it would play out'. Participant 12.

'To be fair I spent about two hours chatting with [name of previous manager] beforehand. She showed me around the department and I had a chat to her about it'. Participant 11.

Interestingly, the participants who had been able to talk to someone who had been in post for the role they were seeking found transition into the role easier and expressed fewer 'surprises' once they became clinical teachers themselves.

4.4.1.3 Formal induction

Formal induction was discussed by nine of the 13 participants. These sessions were offered by the University (regarding the MBBS curriculum and requirements for clinical teaching) and/or the employing institution (comprising a series of statutory and mandatory training, corporate induction, and meetings / presentations conducted by the educational leads):

'We had a week of induction with [name of base unit deputy sub dean] and [name of base unit sub dean] and [seconded clinical education research colleague], and then all the leads came and told us what their rotation was. It was an introduction - how to do small group teaching, how to do feedback, stuff like that. And so that was a week's programme that they delivered with us'. Participant 4.

These sessions had mixed reviews, with some clinical teachers finding them useful, and others less so. There was no shared understanding of how these preparatory inductions were delivered or experienced, and the nature of induction varied greatly between NHS organisations:

'Most teachers are teaching in phase two and know nothing about what happens in phase one. And I wouldn't have done either and didn't until I came here; I knew [previous university post holder] really well - I still didn't know what went on, like what exactly was taught. And I think it's useful - just getting that big overview of who these people are, what is expected of the course, what stage these final years are at because of what they've done previously. What stage you are expecting them to be when they leave'. Participant 3.

'There were quite a few formal sessions, but the fact that I can't remember them now probably tells you that I don't know how useful they were. Because I probably should be able to remember them it wasn't that long ago. A part of it... so things like we went to talks on the curriculum, so we understood that - most of us were [case study University] graduates, some of us weren't - so that was more useful for them. But other than that, it was, yeah it was just gearing up for the thing'. Participant 9.

'So apart from the stuff that I had done like the medical education programme that I did in foundation, there wasn't anything before I started. So, we start in August, which is a month before the students start. So, there is a kind of induction programme locally for that, which goes over a little bit about educational projects and things mainly, and the way that things work in this department - but not really much about how to teach. I guess doing the [post graduate] certificate is kind of helpful in exploring that. So, it was mainly kind of learning on the job, and learning from your peers, and learning from other teachers in that department'.

Participant 7.

Formal induction was useful, as it orientated teachers to the undergraduate medical programme, the university, their role and the wider teacher network:

'There's obviously a lot of flux in the people who teach coming from in and out the region, not being (case study University) graduates. And I think sometimes it's hard to get a handle on how it's all organised. And I think the knock-on effect of that is when a person comes to the ward or wherever to learn then a lot of people in my experience that I've spoken to, said I don't really know what I'm meant to be teaching, and what they're meant to be doing'.

Participant 13.

'I think [induction] would have been really useful because there are things that you don't understand. People are talking about all of this stuff - that I now talk about myself - that meant nothing to me. Letters, just letters. We're talking about CIDR, we're talking about ICP. What?! Phase one, phase two, stage one, stage two, stage three. What?! So, there's a lot of stuff that I think the induction would have been marvellous for, and just kind of networking'.

Participant 3.

For participants who had not received an induction, this was seen as a loss by some:

'I didn't get an induction here at the Uni when started as in [previous base unit]. But I know there is a clinical teacher's induction now... and I think that would have been really useful because there are things that you don't understand'.

Participant 3.

It may be worth noting that all the induction materials provided by the university are available via a bespoke intranet site that all clinical teachers are able to access. In this case, it seems that the didactic information delivery was not the main motivating factor for attending an induction – the opportunity to meet and network with other clinical teachers was more important to them.

4.4.1.4 In-post learning

Following the induction period at the beginning of a teaching post, all participants expressed the view that separate and continuing development opportunities would be necessary to fully prepare them for the role. The volume of information and steep learning curve necessitates ongoing preparation in addition to support. They need to know what is coming, and then have adequate support to manage it:

'For new teaching fellows I think there are so many sources of information to access. I think it just takes time for that information to sink in. I guess it's just slowly built up over time. Yes, I was completely unaware of all the different things that I'd do this year right at the start'.

Participant 8.

'I had to find things for myself to do, which sounds funny because I've had a couple of weeks - a month or so - with [name of manager] to show me things - but I mean nowhere near what I had to know - and I'm thinking you know... You're learning it all and, it was such a 'boom! get on with it'. Participant 10.

One participant did not view it only as the role of the university or the employer to prepare them for the teaching role, stating that it was more a matter of individual teacher responsibility:

'That's not all the university's role. I mean, as the teacher your responsibility is to know where your learners are, so it sort of takes two to tango... well three to tango doesn't it?'.

Participant 13.

In terms of developing a career as a clinical teacher, interview participants highlighted three key factors that had informed their existing or anticipated educational career. Those factors were informal and formal staff development activities and suitable career role models and are summarised in Figure 30 overleaf.

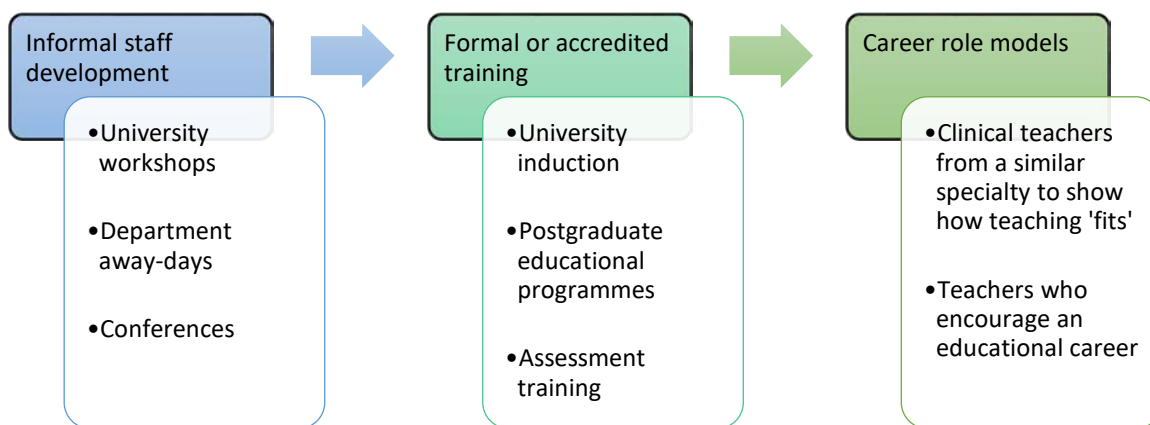


Figure 30 - Factors influencing the development of clinical teachers

Informal staff development activities generally focussed on the practical skills associated with the teaching role, such as small group teaching strategies, communication skills and professionalism assessment. Although not formally accredited or containing a comprehensive theoretical framework, these activities were valued by teachers for their utility in helping them 'do the job':

'There's quite a lot of small group work which was nice in terms of things like the one session we all remember vividly is one of our first sessions together which was deliver a three-minute teaching session on anything. So that type of thing [is useful]. Micro-skills'. Participant 9.

However, the timing of these activities had to be right, in order that teachers were able to gain the full benefit:

'I did come to some of the small group teaching and large group teaching and things. I did come to them, but they're not necessarily for brand new [teachers] - anybody can go to them. So, I remember feeling a bit out of my depth; I came to one in the first week and thought 'actually I don't think I should have come to this until a little bit later'. Participant 3.

Formal programmes generally contained more theory than informal sessions, and many participants enjoyed them:

'Doing the PG Cert certainly opened my eyes up in terms of thinking about how I approach teaching, how I prepare for teaching, how I deliver teaching'. Participant 8.

Staff development activities targeted directly at the development of educational skills and knowledge was viewed as being valuable in developing teaching practice:

'I think doing the certificate [of medical education] at the same time [as being a teaching fellow] is really useful - because it makes you look at things differently. And I think the certificate was a big learning curve for the shift in how I saw myself - from a teacher to a facilitator I think'. Participant 4.

Teaching development programmes which were formally assessed and offered academic credit for successful completion were viewed as valuable by participants who had undertaken them, but they admitted that they had not anticipated the level of time commitment required:

'I thought there would be some work involved - obviously it's a qualification - so I expected there to be some reading and stuff. But I totally underestimated the amount of work that was required'. Participant 7.

For a few participants though, the formal nature of the training and associated assessments were perceived as stressful:

'I've always kind of had things going on, but the level of responsibility I've never felt overawed by it, until the PG Cert. assignments'. Participant 12.

Most participants viewed development activities as useful when they were coordinated to fulfil a perceived need at a particular time.

For some participants (many of whom held teaching posts that pre-dated formal induction provision) advocated the experiential learning route:

'I always think 'you don't know what you don't know', so if you don't know about it, you can't go and ask about it. And it's only through experience that I've realised 'oh, I need to know about this' and I can anticipate what's coming, so I go and approach the most relevant person'. Participant 1.

'I think it's one of those things - until you start doing it, you can't learn it. You've just got to do it, and you've got to learn by your mistakes. So, it was nice to do feedback and how to do

small group teaching. But I think the best thing that they can do is just let us get going'.

Participant 4.

In terms of development beyond the current teaching role, participants overwhelmingly emphasised the importance of career role models on whom they might model their own career. Evidence of this has already been presented in section 4.3 regarding identity, specifically, section 4.3.2.3 - Seeking career role models.

A particular challenge was faced by the clinical teachers coming from a health care assistant background, who had been unable to identify any formal staff development programme to help them develop as teachers, or progress their career beyond their current band 2 pay grade (the 'banding' of an NHS role and its salary is allocated according to the roles and responsibilities of that job. In order to increase the banding, training and development are necessary):

'When I started [the clinical teaching] role, they did advertise that they would do a National Vocational Qualification for us, because we're the first health care's doing this. That has never come off - despite the asking - and it's because the role we're in, we're not actually HCAs. And we're not actually admin, we are in the middle. And there's no set [training pathway], unless you do something like customer service'. Participant 9.

4.4.1.4.1 Experiences relating to innovation

The theme of innovation encompassed how teachers could engage in innovative practice, the value of a workplace culture that supported innovation and the importance of teacher autonomy. In order to engage in innovative practice, participants were clear that the employing NHS organisation and individual colleagues needed to demonstrate 'buy in' by providing a safe and supportive environment:

'This department is one where your crazy ideas about teaching, someone will take and say, 'that's not crazy that's brilliant' or 'that might not work but let's refine it like this'. Participant 9.

Teaching fellows are encouraged to undertake a formal educational project during their one-year post, and this was perceived as valuable by all teaching fellow participants:

'I'm doing an educational project, and that's been a really good opportunity. The people we've got here and the Trust, who are being able to shape and develop us on our journeys to see these projects from concept to implementation. Yes, the projects might be small, but it's not just about the end product - it's about the development and that journey to get to the implementation'. Participant 8.

The purpose of these projects is to design, deliver and evaluate an educational intervention with a view to producing a short paper or poster for publication. This not only enhances the individual's CV but also provides the department with a valuable teaching resource. Many teaching fellows discussed their handover strategy in relation to their projects, to ensure that the next cohort of teaching fellows could continue their work.

In terms of negotiating impact, some participants found that it was difficult to know where they could make changes to established resources and procedures, which limited their ability to engage in innovative practice:

'I think there's a feeling that the timetable and the curriculum is very set, and if we go interfering with it, you get the feeling that people don't like that (laughs). So, you've just got to be careful not to tread on people's toes'. Participant 6.

4.4.1.5 Handover

Handover documents were not a formal part of any participants' induction programme, yet many had been provided with them as a result of previous post-holder's initiatives:

'[A handover document] was created for us. But you don't write everything down because a) they'll want to do something differently, and b) you just need to experience it. You don't want them to be told what to do, and 'just because we want to do it like that this year, you might want to do it differently next year'. They've kind of got to make their own judgment of some of these things. And is someone actually going to read it from top to tail as such? So, I think it's got to be very brief, and it can't be about everything - there's so much'. Participant 8.

There was a clear desire to 'pass on the baton', and make transition easier for new post-holders – even if this meant doing it in their own time:

'Because that's the thing, that's what this job does. It just makes you care. So, I don't mind if [handover] is in my own time if that makes sense. Like I'll just pop in, tell them what I've done. And it's so much nicer just to chat it through. As well as we've made them like hand over files and stuff. So that... we did a bit of that in August, possibly a bit more than was needed'.

Participant 9.

During the interviews, no participant explicitly stated that their NHS employer had directed them to develop handover materials, yet many participants saw it as part of their role at the end of a fixed term teaching fellow contract.

4.4.1.6 *Lack of progression opportunities*

A lack of suitable teacher development activities was raised by some participants, and was a particular issue for those teachers from a non-medical background where no identified formal programme was available to them. This lack of development was reflected in the belief that progression as a teacher would not be possible for these participants:

'If they keep us doing what we're doing there's no progression, there's ... no progression for us. There's nothing [in terms of professional development programmes] for us to do. There's no little courses. Everyone else gets to do things but we don't'. Participant 11.

4.4.2 *Support*

In terms of the support phase, three key elements emerged from the data (see Figure 31 opposite).

Support offered	Support received	Unmet support needs
<ul style="list-style-type: none"> •Peer observation of manager •Supporting colleagues and peers 	<ul style="list-style-type: none"> •From University •From manager •From employer •Via documentation •From colleagues or peers 	<ul style="list-style-type: none"> •Unmanageable workload •Lack of support reciprocation •Lack of staff continuity •Lack of personal support from manager •Lack of information from University •Feelings of isolation •Conflict resolution

Figure 31 - Three elements of support

4.4.2.1 Support offered

Where support mechanisms were successful, it was largely workplace cultures that encouraged reciprocal feedback and peer observation between clinical teachers and more senior staff:

'...The teaching and education fellows are a great support as well. And I think that it's a lovely partnership with them we have. Because they come new to the experience of education - so I'll have a lot to offer them - and they have more medical knowledge and clinical knowledge in terms of medicine -so they help and support me as well. We do do a lot of peer observation and it's never a problem to go to anybody in the faculty - even the more senior people - and say, 'look I would appreciate it if you'd come and watch me, and give me a bit of feedback here, and see how I can improve'. In fact, that's actively encouraged. Yes. The more you do, the better. Participant 1.

'I've had good support from the teaching fellow [grade clinical teachers] actually. I've endeavoured to have quite a flat hierarchy. So, for example we do peer observation. I try and do a bit of peer observation every year and make sure that some of the juniors observe me, and make them give me some feedback. And I really like that. I really like it when somebody

who I employ, several grades below me, feels comfortable to criticise me. So, I like that’.

Participant 2.

4.4.2.2 *Support from a manager*

The greatest source of support was overwhelmingly identified as the participants’ supervisor or manager (eleven participants) and their colleagues and peers (ten participants):

‘I guess now I’ve got a really good relationship with (name of base unit sub dean). I’d kind of class him as a mentor really. Effectively, you know, he’s my boss - but I’d like to think of him as a friend and as I say, as a mentor. He’s been super supportive ever since I was a teaching fellow - like really encouraging of opportunities, and then very early on he said, ‘you know, stay in touch, and you know, we’ve loved working with you’, and so it made you kind of feel valued and like they wanted me as part of the team. And then when it came down to it, that that was the case again, when it came to, obviously, looking for a consultant job’. Participant 13.

‘But we have obviously supervisors and things like that. So, my supervisor has been very supportive, and the whole department here to be honest - the whole culture in this trust is very nice, compared to other trusts that I’ve encountered’. Participant 7.

4.4.2.3 *Support from colleagues and peers*

Support from both colleagues and peers was evident from every participant and was noted as being both valuable and forthcoming in most cases. In contrast to specific areas of teaching practice, support was equally welcome from all members of the educational team regardless of professional background or role:

‘We’ve got the support of the rest of the teacher fellow team within the base unit - we’ve got the support of [name of nurse teaching fellow] and the lead at [name of base unit] really. And she’s always overseeing everything and if you had any questions she’d have the answers to them. So, there was always a support network there available should you require anything. If she didn’t know she knew who would know the answer. So, I think having that that person there - she’s a fountain of knowledge’. Participant 11

'We got a lot of support from (name of seconded clinical education research colleague) - I've mentioned before - like her being here was brilliant. Just because she makes you think in a different way. She asks you all the questions and you come out with more questions than you went in with. But it makes you stop and go - 'well I didn't think of it like that'. So, she's been really helpful just in that - I think we'd all agree - just keeping us on track throughout and letting us know that it was okay to mess something up and for it not to go right the first time. And that, yeah, has been brilliant'. Participant 9.

'But probably the admin girls are our biggest support, because on the first few weeks you go in and you go 'I've got this, I don't know what I'm doing'. 'Right. Here's a folder. This is what you do. This is how it runs'. I think our biggest source of support is admin. I always thought it would be the consultants and the leads - and they're there if you need them - but the admin are absolutely untouchable in regards to reliability, and their knowledge. And then I think as we change every year, they must get fed up of the same questions every year. Probably the admin are our biggest support and I think they make it run like clockwork. I think it's due to them. I think they're the unsung heroes a little bit'. Participant 4

All participants from Base Unit 1 expressed the concept of a 'flattened hierarchy' in the education department. These participants advocated this approach very strongly:

'I guess one of the reasons why I have enjoyed the year so much are the people who have been there and who are around - and I mentioned earlier how there's the admin side of things, there's us as clinical teachers or teaching fellows. And then there's nurse teaching fellows and there's all the consultants. And we're all very much on the same level, using first names. It's not 'doctor this', 'doctor that'. So, it's that sense that we're all part of one team'. Participant 8.

'I try and do a bit of peer observation every year and make sure that some of the juniors observe me and make them give me some feedback. And I really like that. I really like it when somebody who I employ, several grades below me, feels comfortable to criticise me. So, I like that'. Participant 2.

Not all the participants felt that support from colleagues was as forthcoming though, with the two HCA participants in particular finding that although they were expected to be supportive of others, there were no reciprocal agreements in place for them:

'My job description more or less states it's to assist everybody, support everyone. Literally everyone; the office staff - it doesn't say anything, who supports you - but we're to support everyone - the office staff, the nurses, the doctors, the students - which we do'. Participant 13.

'We support everyone. We jolly them. We needed that little bit of encouragement as well, which makes us speak up now. And [our medically trained colleagues] probably think they should go back to not encouraging us a little bit! If you get encouragement, then you're not frightened to speak up a little bit'. Participant 11.

4.4.2.4 Support from documentation

There were several documentary sources of support identified by participants as being useful. A completed timetable was reported as being particularly valuable in the early stages of a teaching post:

'I had the help and support around, but I think the timetables were there, the sessions were in. You just had to go along with it, and work at it, and get used to it'. Participant 10

However, not all educational departments operated in this way, and some teachers were presented with a blank diary to fill out themselves:

'You have to organise your own time. So, you have your blank diary and you have to fill that - which is a skill in itself as well - that I've had to learn this year. But you could look at that as an advantage because you can basically create your own work to a certain extent'.

Participant 7.

Some useful documents (such as lesson plans and previous PowerPoint presentations) were available on shared educational drives on the hospital IT system, but some participants required some prompting to make full use of these resources:

'I think everyone is easy to go ask questions to. Yes, you might get... they might take the mick out of you a bit, then they go to [name of participant] - have you looked on the X-drive?'. And you go 'oh no, I probably should have looked there'. But, you know, people point you in the right direction to the X-drive, they email you the right information. So, they're constantly

checking to make sure that we are aware, that we've got these sessions coming up - so we're well informed as to where we are teaching, when we are teaching'. Participant 8.

Some teaching fellow participants gave examples of where they were unclear of lines of responsibility for particular teaching sessions, and the senior teacher made their own arrangements based on 'what happened last year', which was challenging for the teaching fellows if this was not clearly articulated:

'I think it would have been nice to have a clearer idea in my mind what I was expected to do, bits to organise. So, for example in the neurology FoCP week, in my mind I thought the consultant was going to organise which doctor was in each station and which patient was in each station - and it was only when it came to the day that I realised 'no one's doing it, I'm going to have to do it'. So, it wasn't very clearly communicated what my role was within each teaching block, whereas I think if I had known that I'd have felt better prepared for it, and better organised'. Participant 6.

4.4.2.5 Support from the employer

Many participants were very positive regarding the level of support they received from their employer in terms of organisational culture:

'So, I would say [name of base unit] has been amazing in terms of, you know, facilitating personal growth'. Participant 2.

'So it's just it's more the environment that lends itself to support I think. It's that idea that you know you could ask if you needed it. People don't need to come in and go - how you doing?' Participant 9.

This culture change compared to former clinical positions was an unsettling experience for one participant:

'The change of pace was weird. They'd block out whole days for me to do induction stuff. In practice, you'd be expected to come in early and stay late to fit that stuff in around a normal working day. So, there was this thing of, you know... It was nice, but I also felt sort of perpetually guilty like I ought to be... I was used to that as such an intensity'. Participant 5.

Some of the participants were encouraged and supported to conduct educational projects or research as part of their role, which was generally regarded as a good opportunity:

'Because I think it's important to do an educational project because you have the opportunity to do so, it's encouraged, and it adds a different dimension to your work as well'. Participant 7.

4.4.2.6 Support from the University

Support provided by the university responsible for the undergraduate medical programme was not what participants might have hoped for. The university was not perceived as having a great deal of involvement with front line clinical teachers:

'For me personally, I wouldn't have said I had much interaction with the university from a support network, I'd just say it was more [name of nurse teaching fellow]'. Participant 12.

This issue was exacerbated where the base unit was at greater geographical distance from the main university campus, or the satellite hospital was at a distance to the main base unit site:

'And I never felt unsupported at all. But I think it occasionally felt a bit like we were up in - well we are, aren't we, off in the sticks - and things were a bit different in [the central hospital]. But that was all'. Participant 9.

The most positive area of feedback regarding university support was around the provision of a formal postgraduate certificate in medical education:

'I think personally yes, I have very much benefited in terms of doing things like the PG cert, developing my practice, the opportunities to not only teach, but teaching in a range of environments, a range of subject matters, content, from small classroom based sessions with one or two students, six seven students, through to going to the lecture theatre with the larger groups and then going to the university and doing a lecture there once to a whole year group. So, it was only a one off, but it was quite fun to do, and it was quite exciting to do'. Participant 8.

The university also had a role in providing networking opportunities for clinical teachers from a non-medical background, and for giving them a platform from which to promote their knowledge and expertise to medically trained colleagues:

'When we came for the [Non-medics in medical education away day] - that was like 'woah, brilliant!', you know? And when we came up to [the university, for the biennial clinical teachers' forum] we were on cloud nine to think we could be asked to come, because we don't get to go to these things. And it's not that - we know we can't do it a lot - but it would be nice occasionally just to be... to do something... just to be included'. Participant 9.

4.4.2.7 Unmet support needs

A number of participants stated that they did not feel they were supported by colleagues, their employer or the university in some areas. Clearly, if there is a support need expressed by teachers which is as yet unmet, this is worthy of further investigation. These unmet needs centred around the themes of team dynamics, communication and workload planning.

There were some participants who reported that their support needs had remained unmet around issues of management and communication skills. Many of the situations described by the participants could be grouped together under the heading of 'unresolved interpersonal issues'. These included personality clashes and social isolation which, despite participants seeking support from their manager, remained unresolved.

One participant described the difficulties they had encountered as a new post-holder, and the feeling of isolation and lack of professional respect which they had encountered from their new colleagues:

'I think there's people who - people who haven't worked within the NHS maybe, who are very much university based - are dismissive of me. I don't challenge [the dismissive behaviour] to be honest. It's almost not done directly. So, it's difficult to challenge. A lot of it's not done directly, a lot of it's from other things that you pick up. When your opinion's not asked, or you're not invited to somewhere - that you feel that you should be. So, it's a lot of things like that - as opposed to somebody standing talking to me and giving me that impression. And when it's kind of constant as well. So, some of it is not by omission, some of it is outright. It's kind of 'well, what do I need to speak to her for? Off you go, little girl'. Participant 3.

When asked if they thought there was anything that could be done to support the participant, or help to resolve the issue, they felt that there was not:

'I think the people who need to know about it, know - and have tried to be supportive to be honest. But yeah, I think I think there's a cultural thing here. I think there's a massive clique. And if you're not within that, boy do you know about it'. Participant 3.

Another participant explained how an issue that should have been easily resolved with appropriate support from a manager ultimately caused them to leave their teaching role entirely:

'[A conflict about clarity of resourcing and timetable] developed into a standoff. But they [the senior managers] were being quite bullying about it. And I felt like all of that positivity and optimism - I'd just had the rug pulled out from under me, and all I could see was another 10 years of fighting the same fight, and it was getting harder and harder and harder, and never feeling like I was doing anything well. And I thought - 'no, come on, you've had dips before. Just give it time'. But I just... I'd lost the will. For me, I don't need prizes, I don't need accolades, I don't need publications. I need the people that I work with and the people that are supposed to be managing me to know and care about what I'm doing and occasionally to say 'good job done'. And that's all I need. And I wasn't getting it. And I hadn't been getting it for a good long time'. Participant 5.

These issues reflect an organisational lack of support to attempt to help participants resolve the issues with appropriate conflict resolution strategies. In each case, the participant stated that the manager or employing organisation were aware of the issues yet had not implemented measures to seek to resolve them. These issues have resulted in one participant leaving clinical teaching altogether, and another to regret taking up their position at their employing organisation, so I would argue that this is an issue that needs to be included in the analysis as a potential risk to clinical teacher retention.

The other unmet support needs concern issues of unclear communication structures between the university / employing organisation and clinical teachers at the 'coal face', and excessive workload and a culture of overwork:

'The biggest drawback to this job for me is that I think people assume I'm fully informed about things that go on behind the scenes - at much higher levels in the medical school. And I haven't been, it's usually incidental I find out things. And that concerns me for the nurses

coming in now - because unless they're fully informed, they don't see where they need to go with their teaching and where they need to develop. They can't develop themselves if they don't see the bigger picture'. Participant 1.

Excessive teaching workload was articulated by many participants, but the lack of support and insight from senior staff and the employing organisation was associated with the workload being perceived as unmanageable and unreasonable:

'I think my major kind of bugbear with teaching is that... I think the whole culture of it is that you're expected to do it for the love of it. And people do it for the love of it. But when you're under that much pressure, that's not enough. You need time. And you need funding. And you need a bit of support - and it's like any good relationship - love alone is not enough. You got to deal with the practicalities as well. And I feel that that's what the [employing organisation] are doing badly. And I think there's a lot of people that feel like I do at the moment from conversations that I've had, and that they're at risk of losing a lot of really passionate, talented, experienced, enthusiastic people, because there's this expectation that you'll do it for love alone'. Participant 5.

4.5 The university perspective on clinical teaching

Twenty-nine university documentary sources were collected and compared with the verbal statements of the participants in order to check their accuracy and to determine the degree of concordance between clinical teacher and university priorities. An overview of these documents is provided in Table 6 (see Chapter 3, section 3.5.4.).

Data were gathered from participants by means of semi-structured interviews and are presented thematically in this chapter. This area of information is central to the research aim and questions of this research, so was investigated in significant detail. The open and flexible structure of the interviews facilitated the expression of perceptions of clinical teachers on a wide range of issues that they elected to highlight. Probing questions were used to further explore participants' opinions, and prompts were used when insights were not already volunteered alongside descriptions of experiences by participants. The documentary sources were explored according to the basic principles of framework analysis (Mason *et al.*, 2018), whereby the themes previously identified from the participant interviews were compared to the documents. Although a considerable overlap was evident between the participant experience and the university documentation in terms of topic, interestingly, there were no outliers or new themes generated from this comparison. Useful staff

development session topics, the role of the clinical teacher and induction programme information were the same between both interview and documentary sources.

Little specific information was contained in the university documentation to outline the specific roles and responsibilities of clinical teachers from the university perspective. Where information was provided, it was non-specific in terms of base unit and teaching role and offered little functional guidance for new or prospective teachers (see Figure 32).

What the university expects from clinical teachers:

- 1) Teach our outcomes*
 - 2) Teach effectively*
 - 3) Assess in course and at end of stage*
 - 4) Role model good professional behaviour*
 - 5) Identify students with difficulties*
-

Figure 32 - University expectations of clinical teachers (reproduced from induction presentation)

However, two of the three unmet support needs identified by participants (team dynamics and workload planning) were not referenced at all in university documentation. The final unmet support need of communication is offered as an informal university staff development session, but not in the desired context. The session focuses on the Calgary-Cambridge communication model and relates to student-teacher-patient interactions, rather than the inter-teacher communication skills desired by the research participants.

Referring to an identified documentary source (entitled *Staff Development Outcomes*) describing the learning outcomes for all staff development sessions, all such sessions were mapped against the AoME's five key practice domains by topic. For each topic, the frequency of delivery, the delivery methods and the teaching modalities of the sessions contained within it were included for more detailed comparison (see Table 10).

		University staff development programme		
		Frequency	Delivery method	Type of development
AoME five key practice domains	Designing and planning learning	Regular intakes for face-to-face, e-learning on demand	E-learning, face-to-face	PG Cert, conference programmes, staff development workshops
	Teaching and facilitating learning	Regular intakes for face-to-face, e-learning on demand	E-learning, face-to-face	PG Cert, conference programmes, staff development workshops
	Assessment of learning	Regular intakes for face-to-face, e-learning on demand	E-learning, face-to-face	PG Cert, conference programmes, staff development workshops
	Educational research and scholarship	Ad hoc	Face-to-face	PG Dip / Masters, conference programmes
	Educational management and leadership	Ad hoc	Face-to-face	Conference programmes

Table 10 - AoME domains mapped against the University staff development offer

It is interesting to note that the areas of strategic priority for the university (in orange) had a variety of teaching modalities, a range of different activity types (from workshops and conferences to formal postgraduate programmes) and a regular and frequent delivery schedule (with additional 'on demand' e-learning options). This was not the same for the personal / career development areas (in green), where delivery was ad hoc rather than regular, primarily face to face, and with fewer informal workshops (clinical teachers had to either attend a formal postgraduate programme or rely on in-house conferences). There was no 'on demand' e-learning version of these programmes.

All staff development sessions delivered between August 2016 (the date that the record began) and the date of the analysis (February 2018) were detailed on another documentary source (entitled *Staff Development sessions from Aug 2016 to date*). This document was used to develop a word cloud (Figure 33) to illustrate the distribution of session topics in relation to the main beneficiary of that session. Sessions relating to designing and planning learning, teaching and facilitating learning or assessment of learning (AoME domains 1-3) related directly to the university's requirements for clinical teachers. These activities are presented as orange in the word cloud. Sessions covering educational research and scholarship or educational management and leadership (AoME domains 4 and 5) were arguably more beneficial for clinical teacher career progression than for the university. These sessions appear in green. For each topic, the larger the word, the greater the number of sessions delivered. The colour scheme used allows for direct comparison between Table 10 and Figure 33; topics of more benefit to the university appear in orange, and non-essential to the university appear in green.

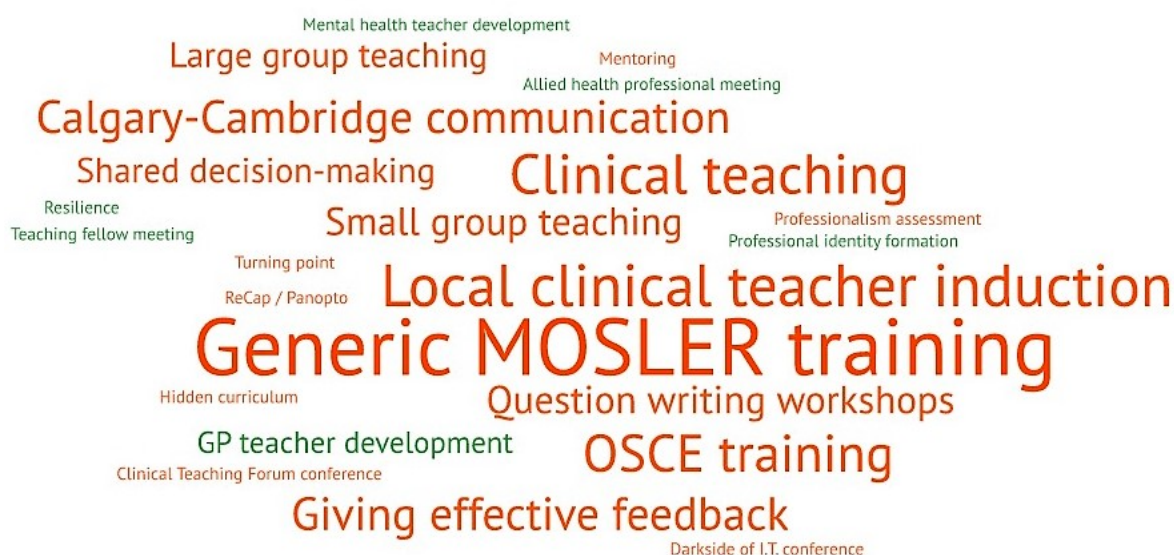


Figure 33 - Word cloud to illustrate distribution of staff development activities relating to Table 10

It is evident from the word cloud that the vast majority of the university staff development offer for clinical teachers is focussed around the core teaching and assessment roles of the teachers. It may therefore indicate that the priority of staff development is to ensure high quality teaching and skilful examiners for assessment – which is no less than might be expected. However, the secondary implication of these data is that personal or career development of the individual clinical teacher is a lower priority for the medical school.

Clinical teachers did not make this distinction. All five key AoME elements were relevant to the teaching experience by all participants, with no one clear 'priority area' emerging. Teachers were keen to develop their skills in planning learning, delivering teaching and conducting assessments, as these are the day-to-day skills required of a teacher, and important to get right. Teachers are easily able to develop these skills, as the university is similarly interested in their teachers being good at their job and accordingly offer a flexible and plentiful staff development programme to help teachers hone these core skills. However, although clinical teachers may be just as interested in developing their educational research and leadership skills, these are not core priorities for the university. As such, staff development is more sporadic in these areas, and more difficult to access. Similarly, it may be more difficult for clinical teachers to gain employer support for their release for such 'non-core' development activities:

'I did a communication skills course because I had some study leave left over.

That was interesting in that I never had... I encountered so much resistance to doing it. The consultant I was working for didn't want me to do it – [he] said 'there's nothing wrong with your communication, why would you do that?'. So that irritated me'. Participant 2.

4.6 Summary

This chapter articulated the findings generated from the interview data, grouped around the five topic area sections of experience, identity, preparation, support and development. A summary of each of those five sections is presented below:

- **Experiences.** The experiences of participants covered a broad range of sub-themes, but the main themes of teaching experiences, working with students, personal development, job role, innovation, working with colleagues, confidence and capability were identified. Working with students and working with colleagues were reported as being the most positive aspect of the teaching experience. Accordingly, when either of these elements broke down the teachers found it particularly difficult to continue with a teaching role. Conversely, issues relating to confidence and perceived capability to undertake a teaching role (from their own or others' perspectives) were the most commonly expressed negative experiences. Clinical teachers from non-medical backgrounds faced different challenges to their medically trained colleagues, especially around issues of status, confidence, capability and development opportunities.

- **Identity.** The theme of identity had three very clear sub-sections; potential role conflict of being both a teacher and a clinician, the motivation to adopt an 'alternative pragmatic identity' and the importance of role models (with regard to influential teaching role models, the importance of being a good role model to students and seeking out aspirational career role models to inform their own career path).
- **Preparation.** Preparation for the role of a clinical teacher was not limited to the induction period immediately after appointment. Some participants reported that their preparation for a teaching role started when they themselves were undergraduates, when they formed ideas about what kind of teacher they wanted to be while observing their own teachers. Preparation for specific teaching tasks occurred throughout their teaching career, in a timely manner; this was important to participants. Participants also saw their role in preparing the next cohort of clinical teachers by developing comprehensive hand-over documents and processes.
- **Support.** Support was both offered and received by participants. As clinical teachers, they supported colleagues when they were able, in both the pastoral and professional contexts. Support for teachers was provided by line managers, colleagues and peers, their employer and the university, delivered in both face-to-face and documentary formats. Three unmet support needs were identified; these related to team dynamics, communication and workload planning.
- **Development.** Development of clinical teachers was achieved through informal and formal staff development courses and by working with more experienced career role models. In terms of university provided staff development opportunities, there was a bias towards planning and delivery of teaching and assessment topics from the university, leaving a deficit of provision around educational scholarship and leadership that was equally valued by clinical teachers, but more difficult to secure employer support to attend.

The chapter also considered documentary sources in order to contextualise the interview findings in relation to documented organisational priorities and development opportunities offered. Specific guidance on the role and responsibilities of the clinical teacher was scant in this formal documentation, which is perhaps reflective of the wide variation of the specific roles of the participants of this research. Teacher development opportunities were limited in areas not specifically related to the planning and delivery of teaching and the assessment of students.

5 Chapter 5 – Discussion of findings

5.1 Introduction

This chapter will provide a discussion of the research findings, positioned within the context of the literature review presented in Chapter 2. Theory developed from findings will be offered and accompanied by models generated to understand the nature of the clinical teacher experience, which will illustrate how the findings of this research contribute to new knowledge.

Seven key areas of findings were identified for further discussion, which were regarded as providing the greatest insight into the clinical teacher role:

- The identity of clinical teachers
- The influence of the CoP
- The role and experiences of clinical teachers
- Staff development for clinical teachers
- Clinical teachers from non-medical backgrounds
- Coherence between organisational and contextual factors and the clinical teacher role
- Pursuing an educational career in medicine

An overview of how the seven areas link to the research questions is provided in Table 11 for clarity.

	RQ1 – How do clinical teachers experience their role?	RQ2 - How are clinical teachers prepared for and supported in their role?
Key discussion areas	The identity of clinical teachers	
	The influence of the CoP	
	The role and experiences of clinical teachers	
		Staff development for clinical teachers
	Clinical teachers from non-medical backgrounds	
		Coherence between organisational and contextual factors and the clinical teacher role
		Pursuing an educational career in medicine

Table 11 - How the research questions (RQs) have been answered

5.2 The identity of clinical teachers

Beijaard *et al.* (2004) contended that the development of a professional 'teacher' identity is particularly intricate for clinical teachers, as they are not primarily teachers by profession. They are required to fit into different roles according to the demands of their job; they are maybe a doctor, health professional, teacher, supervisor, assessor, critical friend, and leader, but also have their own personal identity (consisting of aspects such as sexuality, gender, ethnicity and nationality).

Some early career or non-medically trained participants struggled to adopt a teaching identity and viewed themselves as 'imposters'. Imposter phenomenon was first described by Clance and Imes in 1978, and was described as 'an experience of feeling incompetent and of having deceived others about one's abilities' (Langford and Clance, 1993, p. 495). This definition seems to characterise the feelings described by these participants. In order to overcome imposter phenomenon, Huffstutler and Varnell (2006) encouraged organisations to develop peer group processes, mentoring opportunities and outline clear expectations for teachers; all three developments compliment the findings of this research.

It was evident from the findings of this research that clinical teachers were striving to develop their identity as teachers, but that they required appropriate institutional and peer support to do so. This support was needed as teaching roles and identities developed from student to clinician to teacher, and as clinical and teaching roles developed during a career. This reinforces the perspective of identity as a social construct (Jenkins, 2014), as there was evidence to suggest that the way participants were viewed and respected by others had a direct effect on their teaching identity, and the personal ethos they developed to underpin their teaching practice.

The 'ideological match' between personal ethos and a teaching identity was expressed by participants of this research in three themes, with nine sub-themes (see Figure 34 opposite).

Agent for change	Promotion of areas of personal importance	Legacy
<ul style="list-style-type: none"> • 'Pushing the envelope' • Changing people's opinions 	<ul style="list-style-type: none"> • Promotion of specialty • Promote MDT working • Duty of care • Advocacy 	<ul style="list-style-type: none"> • Legacy, making a difference • Developing students' professional values • Having an early influence on future medics

Figure 34 - Ideological match between self and teaching

These findings suggest that to fully adopt a teaching identity, clinical teachers must have the autonomy within their role to make changes, promote areas that hold personal meaning and create a teaching legacy. To achieve this level of autonomy, teachers require NHS employers and the university to adopt an organisational structure that facilitates and values teacher decision making and innovation. Teachers also require the time in their job to plan and engage with the wider educational team to share their personal ethos with others. The findings affirm that a 'top down' organisational structure is not considered as desirable by clinical teachers, as in order to identify as teachers they need to be able to influence educational practice in accordance with their own teaching ideologies.

This research highlighted an element of clinical teacher identity formation that had not been previously reported in the literature. The concept of a '*pragmatic alternative identity*' emerged from the findings and is my construct, developed to describe how some research participants valued the adoption of a teaching identity as another potential employment avenue in the event of difficulties in their clinical career. Teaching was something that they would be able to fall back on or enable them to move away from the clinical environment. The current political climate of uncertainty around NHS structure and funding is challenging, and the recent changes to the junior doctor contract have resulted in more graduate doctors leaving the medical profession (Lambert *et al.*, 2018). This uncertainty may go some way to explaining the participants desire to develop their teaching identity alongside or as an alternative to their clinical career.

The themes and sub-themes from the literature (Figure 15 - Themes and sub-themes depicted in the literature regarding the identity of clinical teachers) developed during the literature review of this thesis was adapted to include the concept of the '*pragmatic alternative identity*' and is presented in

Figure 35. Major or repeated themes are represented by the eight rectangular coloured boxes, with a summary of the findings within that theme in the adjacent brackets in a corresponding colour. Three cross-theme principles (which apply to more than one of those major themes) are presented in the purple diamonds.

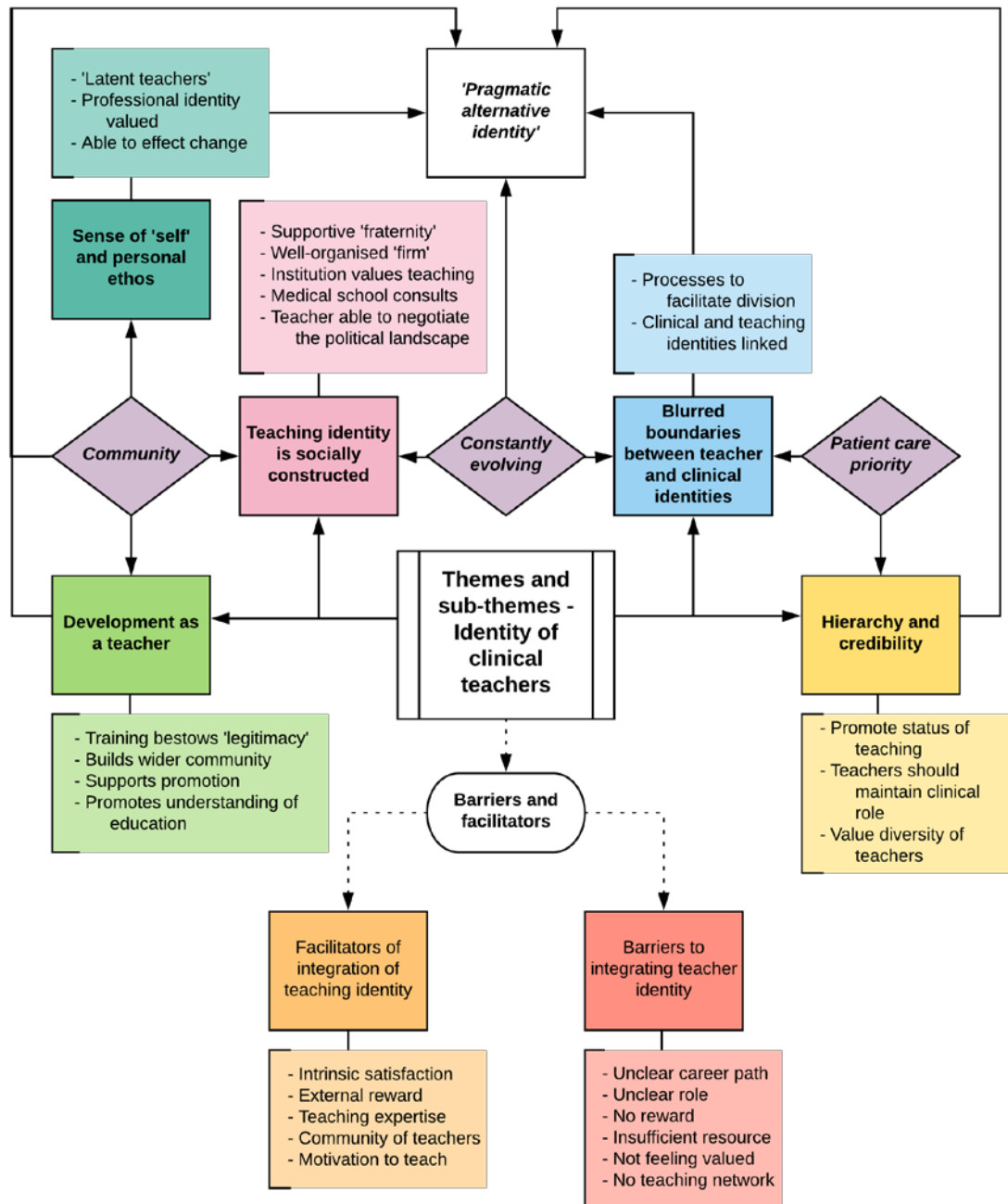


Figure 35 - Themes and sub-themes of the identity of clinical teachers (adapted from Figure 15)

The findings of this research articulate well with the themes and sub-themes previously identified from the literature. The teaching community was shown to influence teachers' identities in relation to their sense of self when they were able to effect change and felt that their professional identity

was valued by the community. Teaching identity was socially constructed in relation to their community and was most positively influenced when organisations (employer and university) had clearly communicated structures and expectations but where teachers had agency to make their own decisions within those structures. The development of teachers was both facilitated by their community (through role modelling and peer mentoring) and influential to that community by fostering networking opportunities to broaden the community.

Teacher and clinical identities were not fixed, with boundaries between the two identities becoming increasingly blurred. Clinical teacher identity was constantly evolving in line with the local community. The political and economic climate of the NHS and uncertainty about the nature of future clinical careers encouraged clinical staff to assume a teaching identity as a means of moving away from front line clinical posts if desired. As clinical responsibilities were reported as becoming more intensive, teaching and clinical activities became less distinct. Clinical sessions were used to deliver more teaching (or as opportunities to source suitable teaching patients), and teaching sessions were interrupted to deliver patient care when necessary. However, regardless of whether participants had adopted the identity of teacher or clinician and irrespective of the task they may be doing (teaching, clinical or support), patient care and wellbeing was always the participants' stated priority.

To maintain credibility as a teacher, it was universally accepted by participants that all clinical teachers should maintain an element of clinical identity within their role in order to preserve professional competence. Diversity in clinical teacher identity was valued, as participants accepted that this brought different skills and perspectives to the wider educational community. However, this was a reciprocal process which also worked in reverse; participants recognised that engaging with teaching activities gave them respite from busy clinics and afforded them the opportunity to develop new skills and gain variety in their role. This in turn facilitated self-renewal and enthusiasm regarding their clinical roles.

5.3 The influence of the community of practice

Regarding CoPs first described by Wenger (1998), the findings of this research align very closely with the revised firms and fraternities model developed by Cantillon *et al.* (2016) and presented in the literature review of this thesis (section 2.4.1). This model is summarised in Figure 36 overleaf.

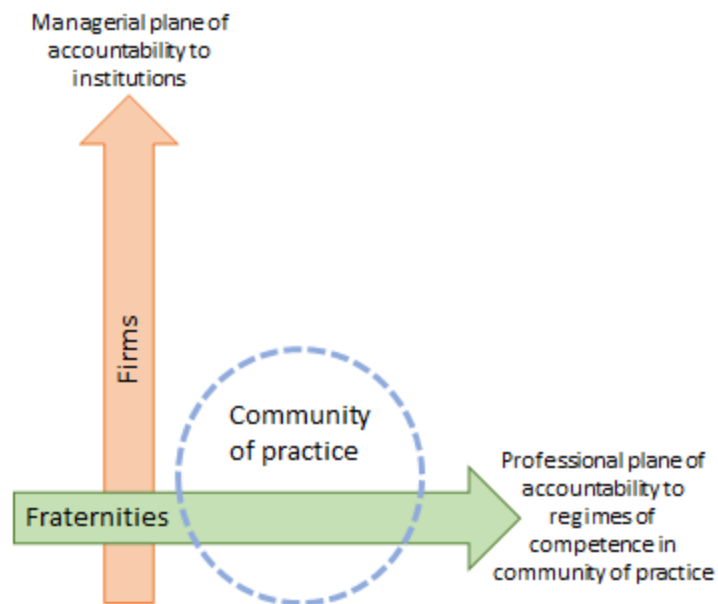


Figure 36 - Firms and fraternities within the community of practice (adapted from Cantillon *et al.*, 2016)

Cantillon *et al.* (2016) asserted that clinical staff develop a teaching identity by interacting with their CoP. The two axes of their model were the horizontal plane of credibility and the managerial vertical plane which was concerned with accountability, with the resultant CoP overlaying both axes. The participants of this research were operating in communities of practice that echoed this structure, with *fraternities* of teaching fellows and junior staff and *firms* of clinical teams along the horizontal axis, with individual participants describing how they were attempting to affiliate with both groups in a combined clinical and teaching career. The vertical axis described by the participants was also similar to that proposed by Cantillon *et al.*, comprising of health care institutions (represented by hospitals, NHS trusts and base units in this research) and the university medical school who were ultimately accountable for the quality of undergraduate medical education.

CoPs within clinical education are by nature distinctive to the hospital and department within which they exist. Even within the FoCP rotation in a single hospital site, differences in the ways that communities of practice functioned were evident between different clinical departments. For example, gerontology '*firms*' were less supportive of clinical staff being away from the ward for teaching duties than some surgical departments. The findings suggested that peer '*fraternities*' were more inclusive of staff other than clinical teachers in more isolated satellite hospitals with fewer clinical teachers than in the main base unit hospital site where a larger team of clinical teachers were based. This was evident despite the employing organisation and specialty being otherwise identical. This wide variation in how communities of practice operate may therefore contribute to potential

difficulties in staff moving between sites, employers or specialties. Previous experience of the clinical education team dynamic cannot readily be applied to diverse settings, creating a potential barrier for teachers seeking to move teaching posts.

By their very nature, CoPs are established locally and shaped by their members. It is therefore not possible for outside agencies to impose their ideas on how any CoP should operate. However, the findings of this research highlighted a number of factors which participants identified as being necessary to promote a CoP with a positive culture for clinical teaching. These particular factors may be promoted by institutions, giving HEIs an opportunity to promote a positive CoP in the clinical setting. Those factors are summarised and presented in Figure 37.

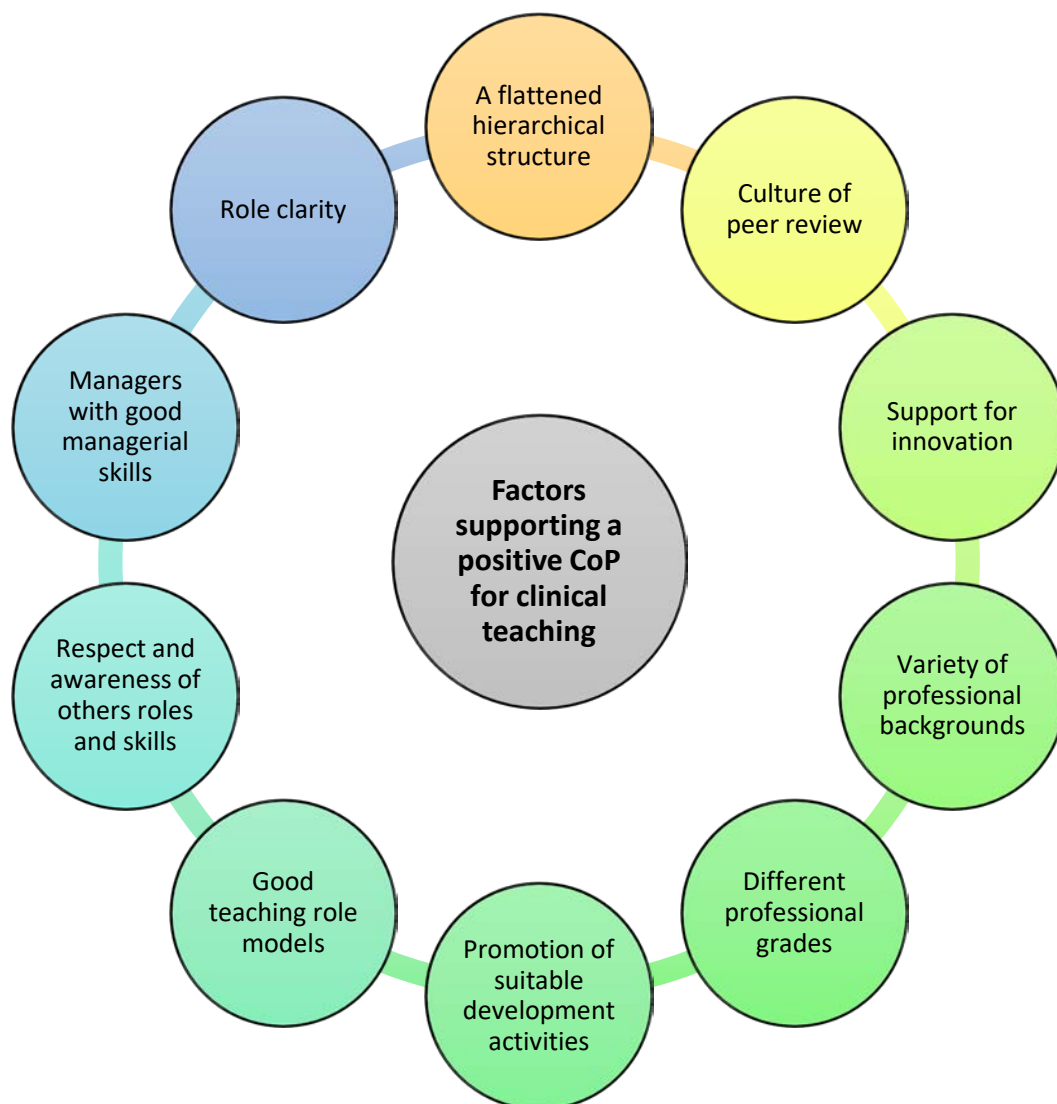


Figure 37 - Theoretical framework to summarise the factors present in a positive CoP for clinical teachers

The CoP may prove a motivating influence on teachers who are considering whether to weave formal teaching into their future career. Positive experiences of successful teaching, interactions with students and a supportive organisational culture emerged from the findings as being strong motivation for retaining a teaching role. Conversely, poor management skills of senior staff, perceived bullying, lack of resources, negative reactions from students in relation to teaching or teacher and lack of a supportive ethos by peers were factors that might influence participants to abandon a teaching post.

5.4 The role and experiences of clinical teachers

The findings of this research support the assertion that the range of experiences reported by clinical teachers is both broad and varied. This variation is reflected in the diversity of teaching roles described by participants. Much of the variation was related to the professional background of the teachers:

- **Medically trained** teachers had the widest scope of practice as they were able to deliver both practical and theoretical teaching sessions that covered all learning outcomes in the undergraduate MBBS curriculum.
- **Non-medically trained teachers** with a background in a health profession (such as nursing) could deliver varying aspects of the curriculum in relation to practice and theory, dependent on their experience and expertise. Their scope of practice therefore varied between teachers.
- Teachers with a **non-clinical background** (such as HCAs) adopted a primarily supportive role for teaching activities, and pastorally for both students and patients.

In addition to the emergent themes (presented in section 4.2), eight overarching principles that characterised the clinical teacher experience were identified. These principles were evident across multiple themes and demonstrated the underlying philosophies that characterise the clinical teaching role. These principles are presented in Figure 38 opposite.

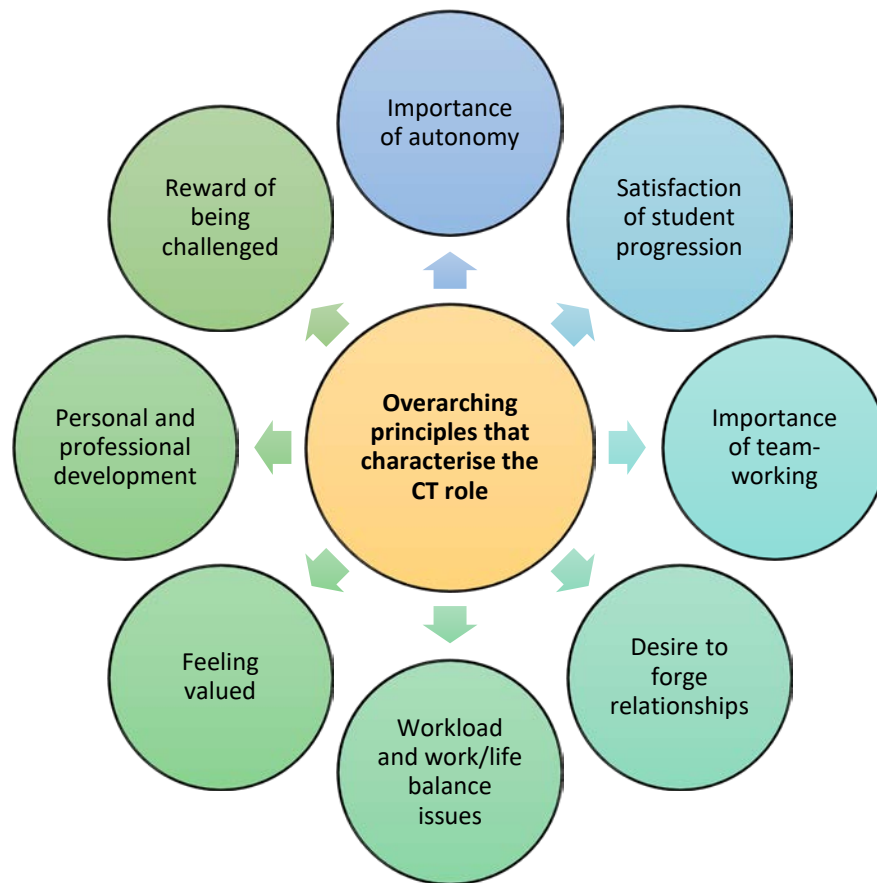


Figure 38 - Overarching principles that characterise the clinical teacher role

The clinical teacher's experiences reported were mostly consistent with those presented in the literature review and summarised in Figure 10 (section 2.3). One particularly interesting area of difference was how influential the perception of and interactions with students were to the experiences of clinical teachers. The research findings have been integrated with Figure 10, forming a revised and more detailed figure to encapsulate the clinical teaching experience as reported in the literature and by interview participants (presented as Figure 39 overleaf).

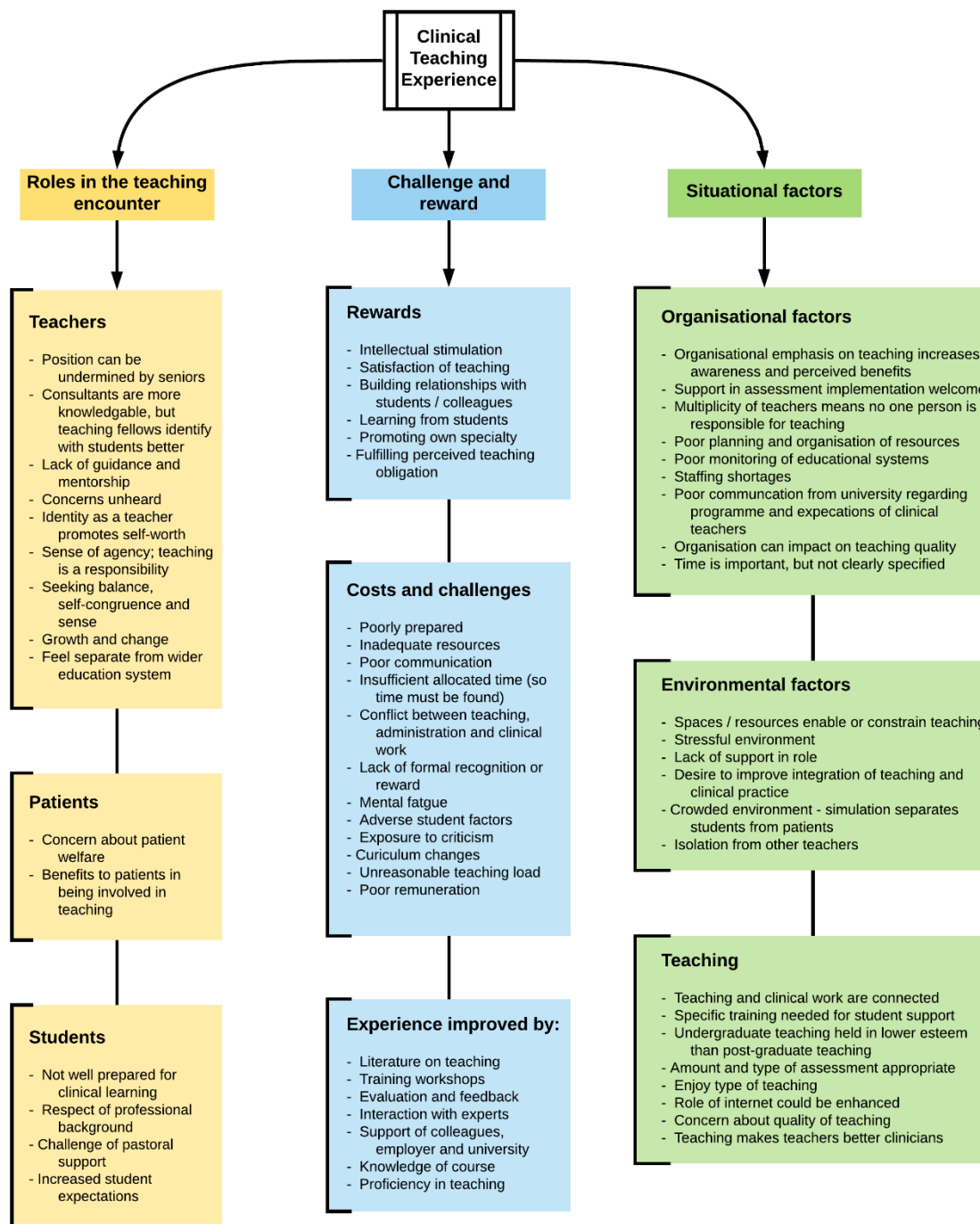


Figure 39 - Revised themes and sub-themes regarding the experience of clinical teachers (adapted from Figure 10)

A strong theme developed from the findings was the importance of clinical teachers and educational managers understanding the function and capabilities not only of their own role, but also of other teachers with differing responsibilities or from professional backgrounds other than medicine. This theme was not previously reported in the literature. The themes and sub-themes relating to the role

of the clinical teacher, presented previously in Figure 9 (section 2.2) were revised to incorporate the interview findings resulting in the amended Figure 40.

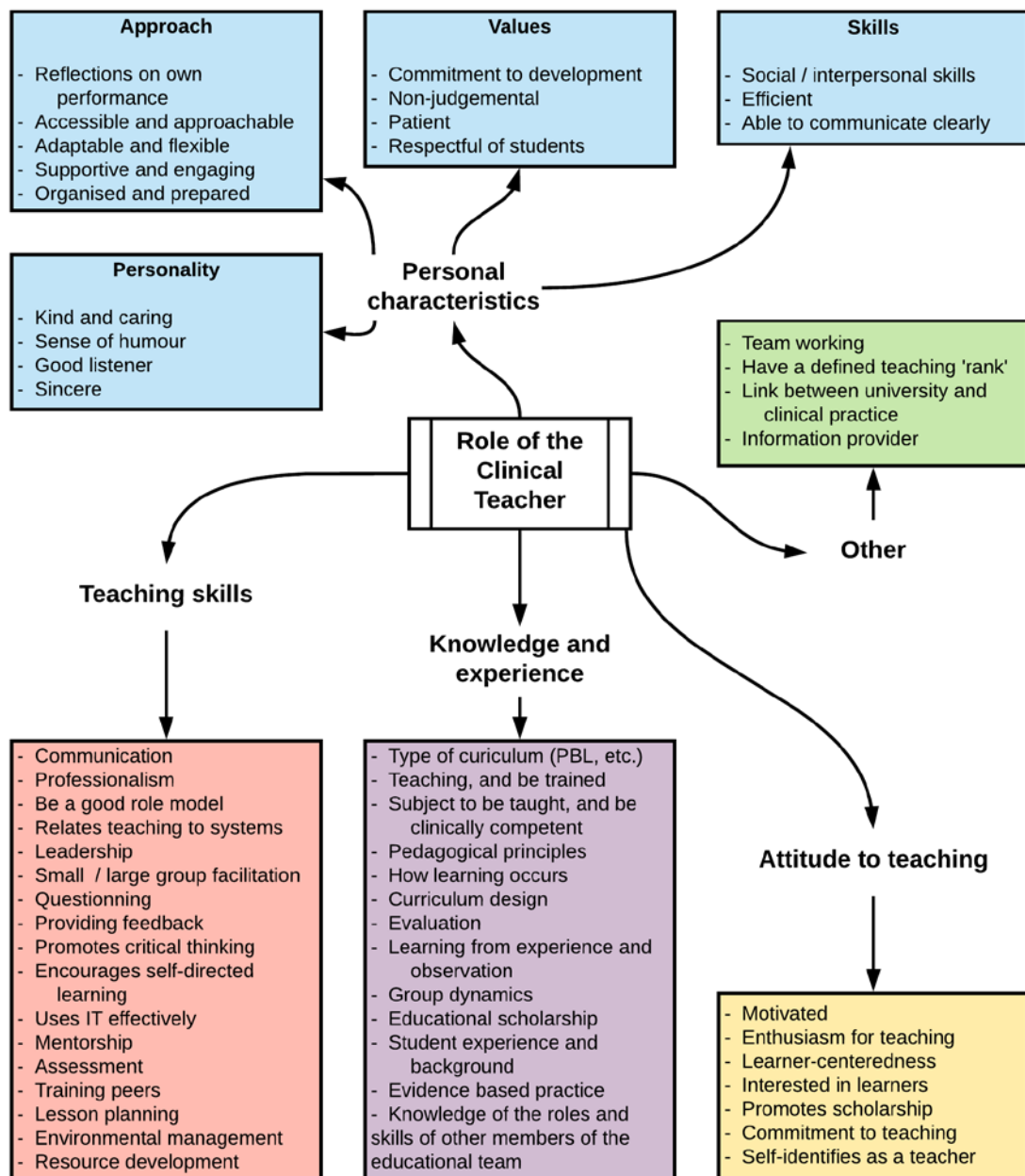


Figure 40 - Revised themes and sub-themes regarding the role of the clinical teacher (adapted from Figure 9)

It is clear that the nature of the clinical teaching role is not universally understood or experienced even within the limited local population of this research. This principle is extended to how the role of each clinical teacher was defined and articulated to individual teachers by their managers, meaning that many participants reported a lack of clarity in what their own teaching role and educational responsibilities were. This was a source of anxiety and frustration to those participants, and a recommendation of this research would be that individual teaching roles have more clearly

defined specific roles and responsibilities written in to job descriptions to avoid overlap or omission within educational teams. This is a task that would need to be conducted at a very local level however, as the precise role of a clinical teacher may be influenced by a number of organisational factors (presented in Figure 41). Clinical teacher job roles where all seven of these organisational factors are not identical are likely to have differences in how that role is structured.

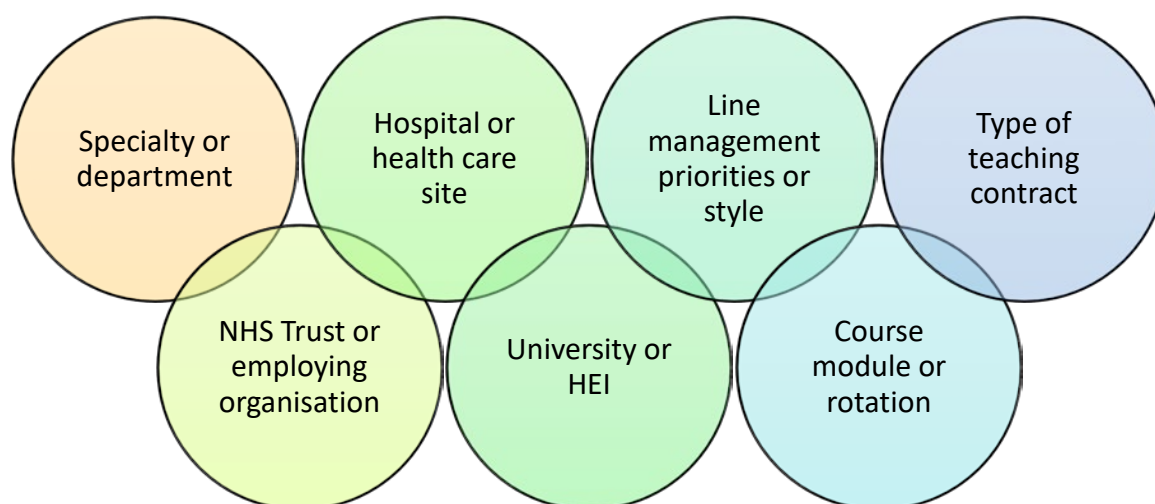


Figure 41 - Organisational factors which may influence how a clinical teaching role is structured

5.5 Staff development for clinical teachers

The research findings supported the literature review regarding the current fragmented system of information coming from HEIs to their clinical teachers directly, rather than being made explicit and consistent across the whole of the medical profession by a regulatory body (AoME, 2014). Many experienced workplace supervisors were reported in the literature as having very little guidance or understanding of what the university programme entailed, or what the medical students might be expected to know (Duvivier *et al.*, 2009, Jacobs *et al.*, 2016). This was reflected by the findings of this research, as several participants were unaware of the nature of the clinical teacher before commencement of (and during) their teaching post.

Given the findings of this research about the desire of clinical teachers to engage in staff development activities that meet their individual needs, there are improvements that could be made to the university staff development offer. To more closely align available provision with clinical teacher requirements and aspirations, increased flexibility of provision and the development of

training in less student-facing aspects of the teaching role is indicated. Participant suggestions regarding development activities and support for clinical teachers broadly reflected the suggested curriculum for a medical education programme (Figure 16, section 2.5) developed following the literature review.

However, two findings of this research were not previously identified in the literature reviewed:

1. Participants were overwhelmingly enthusiastic about the opportunity to develop as teachers, but they recognised that study leave was limited. Development has to be efficient and timely to encourage them to attend, and to gain sufficient buy-in from the employing institution to release them. A variety of teaching methods and attendance patterns would offer valuable flexibility for teachers and enable them to tailor development activities to their own needs.
2. Some participants from a non-medical background felt that staff development sessions offered by the university were only for medically trained teachers, and might not be appropriate for them. This perception does not reflect the reality of the way that these sessions are offered or booked, as there are no entrance requirements other than being involved in clinical teaching. However, there are clearly modifications that should be made to how these sessions are marketed, as several participants held this view.

Accordingly, Figure 16 was revised to incorporate these principles into a proposed syllabus for a formal teacher development programme, presented as Figure 42.

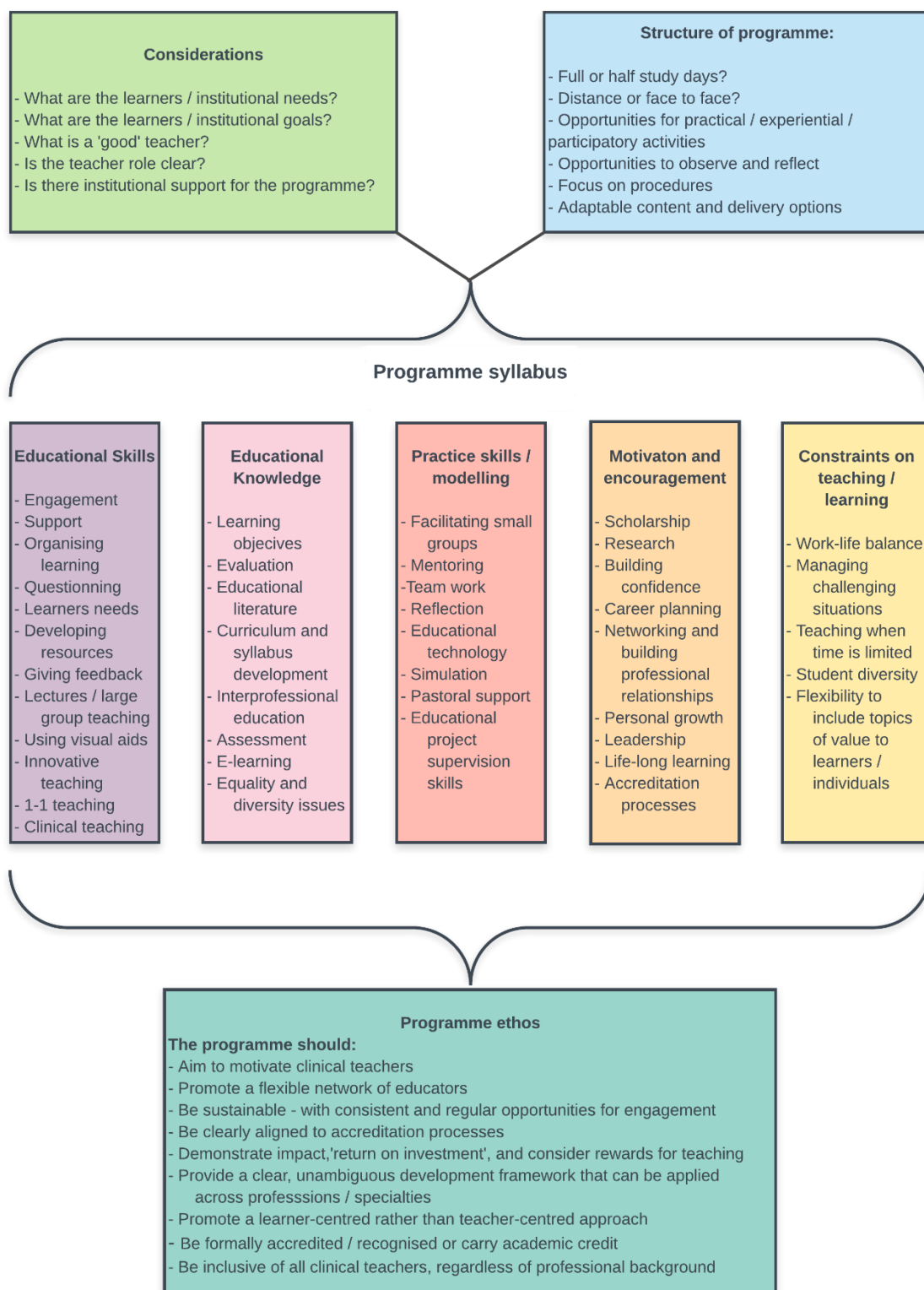


Figure 42 - Revised curriculum proposal for the establishment of a clinical teacher staff development programme (adapted from Figure 16)

The findings of this research indicated that clinical teachers welcome a range of preparation and development options and utilise the whole wider educational team to gain support in their role, although they generally sought support from members of their base unit education department rather than the university. While the university offers a formal postgraduate certificate in medical education and a range of informal staff development activities, there are currently no ‘middle-ground’ options for clinical teachers. The postgraduate certificate has a focus on theoretical knowledge rather than practical skills, and participants are required to sign up for a full year, complete three 3,000 – 5,000-word assessments and pay a fee of £2,600. Conversely, the staff development workshops are free of charge, have no formal assessment and are focussed on the development of practical teaching skills rather than a theoretical knowledge. However, these sessions offer no academic credit, and are generally delivered over a single, three-hour session (or e-learning equivalent). The option of more structured short courses offering academic credit but with a more modest financial commitment than the whole postgraduate certificate may be worthy of consideration. In the first instance, this may be achieved by offering single certificate modules as stand-alone options. This would also allow teachers to focus their development around their own needs / role whilst minimising their time commitment. The modules available on the postgraduate certificate are summarised in Figure 43.

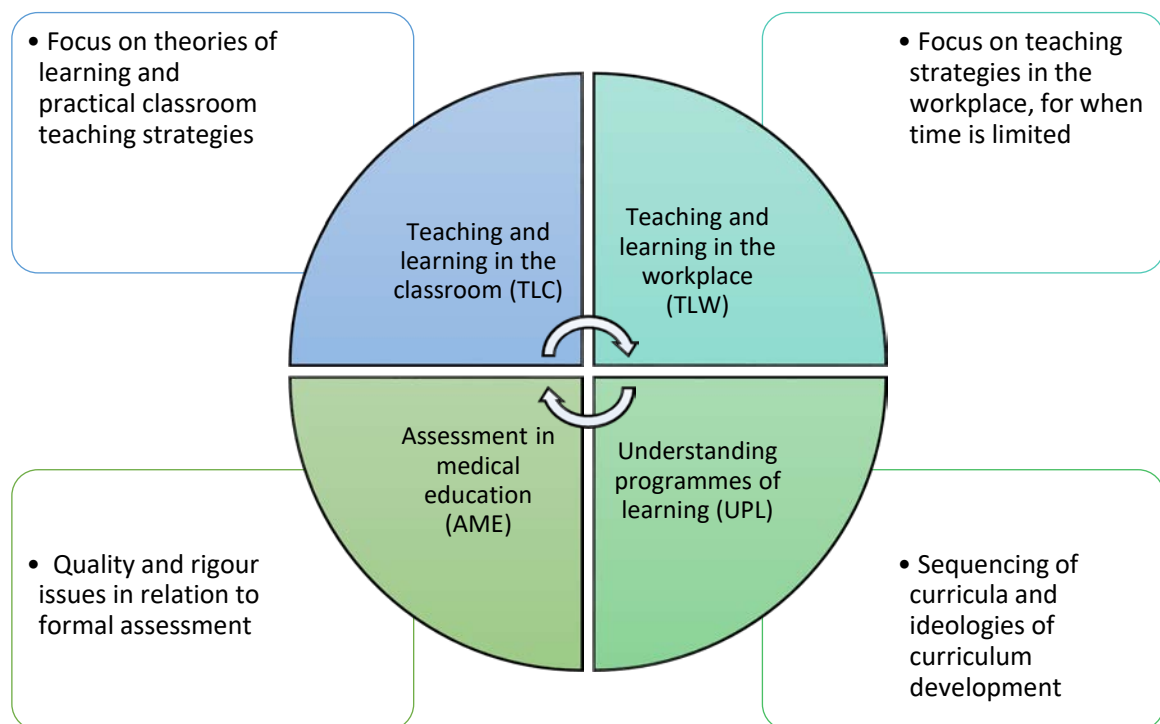


Figure 43 - Postgraduate certificate in medical education modules

Another proposal resulting from the research findings is that of development options for aspects of the teaching role not directly related to teaching, assessment or pastoral support of students. Short courses on management techniques, conflict resolution and educational scholarship for example may address some of the training deficits identified by the participants of this study. Such programmes may even already be available through other faculties or schools within the university, so could potentially be undemanding to offer. When the findings of the research were considered in relation to participant characteristics, it became evident that different development activities were linked to different stages of a clinical teacher's career. Early career teachers required more practical teaching skills, which would be inappropriate for experienced clinical teachers who may be more interested in educational scholarship. This career variation of development needs is expressed in Figure 44.

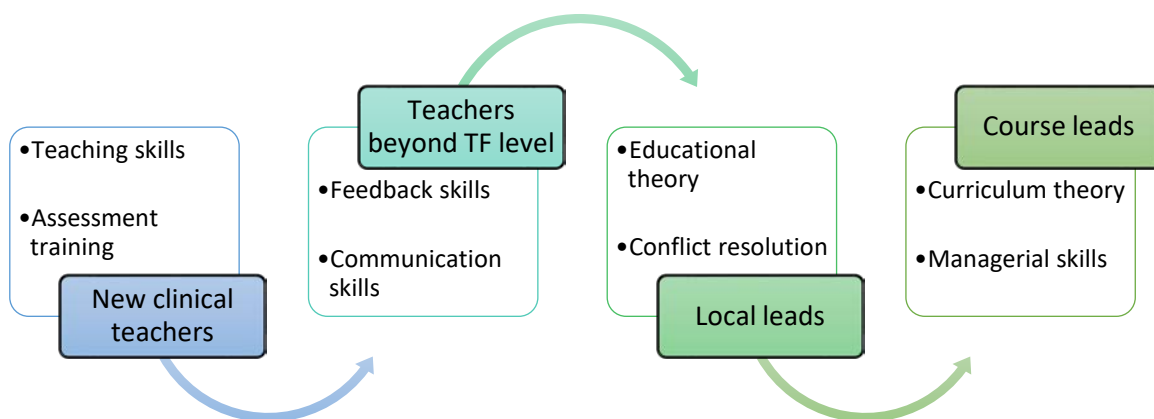


Figure 44 - Development needs of clinical teachers at different career stages

The timeline of role preparation for clinical teachers was more longitudinal and extended than had been previously been recognised by the university. The university perspective is that clinical teachers are inducted at commencement of their role and engage in in-post learning as appropriate to equip them with the skills and knowledge they need during their role. However, the participants of this research described preparation as occurring over a much longer period. Preparation for the role was reported as beginning during the clinical teachers' own undergraduate studies. As students, they observed their teachers and developed their own ideas of what a good or bad teacher was, and what sort of teacher they wanted to become. When they were ready to take on a teaching role themselves, participants explained how carefully they researched teaching roles; they spoke to previous post-holders, prospective managers and peers to gain a better understanding of the requirements of the role. Formal university induction and in-post learning occurred as expected, but teachers extended preparation even further by developing strategies and documents to support the

handover of their educational projects, resources and initiative to subsequent teachers once they had left their teaching post. There was evidence to suggest that this process was repeated for each new teaching post, whether a sideways move or a direct promotion. This process is presented in Figure 45 (as a continuum that extended from a teacher's own undergraduate experience to handover at the end of a teaching post) and could prove useful intelligence for educational leaders when considering their own support and development provision.

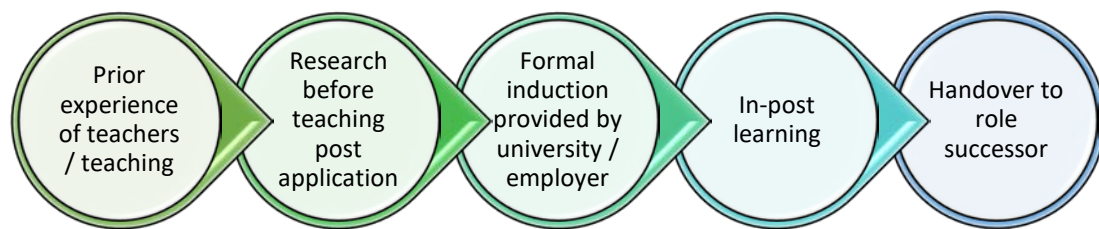


Figure 45 - Theoretical model proposed to illustrate the continuum of preparation for the clinical teacher role

5.6 Clinical teachers from non-medical backgrounds

It has been established that the role of the clinical teacher is opaque and changeable in nature. Clinical teachers find it challenging to gain a full understanding of the role, which is exacerbated when the role or professional background of a colleague is different from their own. Clinical teachers who have a professional background other than medicine also have different support and development requirements than medically trained clinical teachers.

Participants from non-medical professional backgrounds described some characteristics and clinical teaching experiences that differed from those of their medically qualified counterparts in terms of role structure, perceived isolation and issues of confidence and capability. Confidence and capability were expressed as being important for clinical teachers themselves (in relation to their own abilities) and from colleagues. The main themes from the findings that illustrate the balance between confidence and capability are expressed in Figure 46 overleaf.

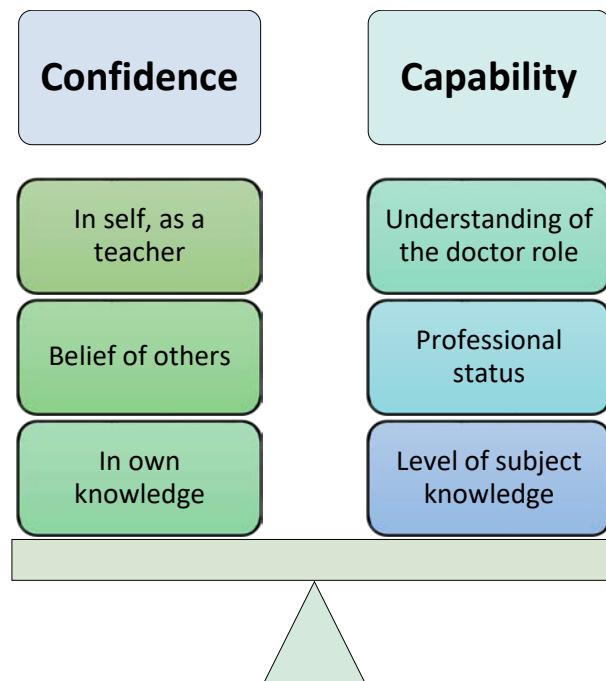


Figure 46 - The balance of confidence and capability experienced by clinical teachers

Entwined with confidence and capability was the perceived status of non-medical clinical teachers. Teachers from a non-medical professional background experienced a degree of their perceived 'lower status' by their medical colleagues, but this was lessened when those individuals had secured a lead educational position, or where efforts had been made to understand the scope of practice and expertise of non-medical colleagues. Students were reported as being particularly vociferous in their belief that non-medical teachers were perceived as 'inferior' to teachers with medical credentials.

What is clear from this research is that the issues surrounding confidence and capability (both perceived by and in regard to the participants) are complex. While some non-medically trained participants reported being regarded far less favourably than their medical colleagues, most appeared quite accepting of this disparity. Pierre Bourdieu constructed a theory of *symbolic violence* (Jenkins, 1992; Bourdieu, 1988) which sought to explain how society exerts restraint on individuals using indirect cultural means rather than overt force or visible coercion. These cultural norms are therefore experienced by individuals as legitimate, which further obscures the power relationships that facilitate the perpetuation of a particular cultural system. The theory of symbolic violence could be argued to align well with the some of the data collected during this research. Doctors were perceived as the most important teachers by all participants, but it is arguable as to whether this is an accurate reflection. Equally debatable is why a nurse with thirty years of experience should be perceived as less prestigious to an undergraduate student than a teaching fellow who is only two years their senior. It is unclear from the findings (and outside the scope of this research) how this

phenomenon might be addressed in practice, but further research to explore these perceptions may be beneficial. It may also allow appropriate training, information or development for both teachers and students to be implemented by the MBBS team.

Lack of perceived opportunities for career progression of non-medical teachers was evident in the findings, although it was unclear from the data whether this was a true reflection of available progression opportunities, or whether the lack of career role models (due to the small number of such teachers in the region) meant that these participants were simply not aware of pathways open to them. This is a potential concern, as clinicians motivated to become involved in clinical teaching may become discouraged if the opportunities for progression in a teaching role are not comparable with those offered by clinical posts.

These non-medical teachers expressed a desire to become more involved with the university and attend networking events to both establish new collaborative working relationships and raise awareness of the role and capabilities of non-medically trained clinical teachers. In order to achieve this, these teachers would need the opportunity to present work to their medical counterparts and have separate opportunities to meet with other non-medical teachers from the wider regional medical school. Strategies to facilitate these networking and profile-enhancing activities are presented in the next chapter (section 6.5).

5.7 Coherence between organisational and contextual factors and the CT role

Poor alignment between the staff development priorities for clinical teachers and the university was demonstrated in the findings. Clinical teachers valued different topics of staff development equally, so long as the skills or knowledge being developed were perceived as useful to them at that time. In turn, the university documentary sources demonstrated a clear priority of development activities that increased teachers' skills regarding learning planning and teaching and assessment.

There was agreement between both the university and clinical teachers regarding the importance of a thorough induction programme for new clinical teachers. Without knowledge of programme structure, clinical teachers cannot effectively fulfil their role. Teachers need to be familiar with what students learn at each point in their academic studies in order to appropriately target their own level and subject of teaching and identify students who may be falling behind (Heaslip and Scammell, 2012). Without a clear understanding of learning outcomes, teaching is not guaranteed to cover all the aspects of a particular module or subject that a student will be expected to achieve. The task of assessment subsequently becomes much more of a problematic issue for the student and supervisor

alike (Falender and Shafranske, 2004). Without knowledge of the university and academic team structure, a workplace supervisor can find it difficult to know with whom to discuss concerns regarding a student's fitness to practice and ensure patient safety (Dudek *et al.*, 2005).

All clinical teacher participants of this research expressed the desire to be able to tailor their role, career trajectory and staff development to meet their individual needs and aspirations. The findings of this research indicate that the university provides a flexible staff preparation and development programme for core academic skills relating to planning and delivering learning, and assessment. However, there are gaps in provision which means that the full range of the clinical teacher role cannot be developed using university provision. Current omissions include leadership training, team dynamics and workload planning, all of which were suggested by participants as sessions that they would welcome. Delivery modalities of teacher development sessions need to be varied and flexible according to the findings of this research, but this has not always been the case. For example, induction sessions for new clinical teachers are delivered by university staff locally in each base unit. However, only one date is provided in each area and those teachers that cannot attend would need to travel to another or miss out. The induction presentations are available as PowerPoint files on the TSE intranet site, but not in an e-learning format that can be considered equivalent to the face-to-face session. It is clear that alignment between university and clinical teacher staff development priorities are variable. The university prioritises development of the skills and knowledge core to the teaching role, while clinical teachers would welcome the addition of activities to support their professional or career development.

Existing programme development from the university perspective is already broadly in line with the findings of this research. The issue of e-learning has been somewhat addressed for the formal postgraduate medical education programme since the commencement of this project. There is now an e-learning delivery route for the post-graduate certificate, diploma and master's in medical education. The e-learning option has proved particularly popular, with a pilot cohort of ten students (drawn from the applications for the face to face programme) in 2016. Applications were formally invited for the e-learning certificate in 2017, and almost 60 students were enrolled (with no impact to the face-to-face programme – which was still fully subscribed). Applications doubled in 2018, with over 100 applications submitted. This might indicate that there was something of an unmet need for such a programme. Although this goes some way to redressing the overall balance of staff development provision, it only assists those students wishing to undertake a formal (and quite intensive) academic programme, rather than more ad-hoc skills development.

5.8 Pursuing an educational career in medicine

All clinical teachers who participated in this research expressed the desire to continue working in education, either exclusively or alongside a clinical career. Even Participant 5 (who was taking a break from education following some negative experiences in their previous teaching role) did not view that leave of absence from education as permanent. A key challenge expressed by many participants was the lack of relevant career role models on whom they could fashion their own educational and clinical careers. Issues encountered included:

- **Limited numbers of senior educational role models during teaching practice.** Usually only the base unit sub dean, the FoCP course lead (who only had a 1 in 4 chance of being based in the same base unit), the base unit FoCP lead and the local lead for FoCP (who may also be the same person as any of the other four roles). Therefore, a maximum of four senior role models are involved during the FoCP rotation.
- **Difficulty of identifying a senior educational role model from the same specialty, and unclear career pathways.** Each medical specialty has different challenges and possibilities regarding the integration of a clinical teaching role. For example, in general practice teaching is easily accessible and straightforward to integrate into the daily clinical routine. Conversely, in radiology, for example, clinical teaching is not deemed to be achievable due to the undergraduate medical curriculum not containing specific radiology outcomes. This context is useful for teaching fellows undertaking their post after completing foundation training as if they are determined to teach, their choice of specialty training programme may be limited. This was certainly the case for two of the participants of this study, who stated that they had deliberately chosen to train as GPs as they were determined to retain a strong teaching presence in the future.
- **Absence of any other role model from the same clinical background.** Clinical teachers from non-medical professional backgrounds were generally a small subsection of clinical teachers in their base unit. In some cases, these teachers were the only non-medically trained teacher in their department. For the participants with an HCA background, an added challenge was that the role for them was only recently established. This meant that there were no similar role models to them in any other base unit. Some specialties were not represented in teaching teams at all, such as radiologists. A reason for this absence may be linked to the structure of the undergraduate medical programme, whereby learning outcomes linked to a

particular specialty were dispersed throughout the curriculum meaning that no specialist input was necessary.

A potential strategy for addressing these difficulties is proposed in the next chapter (section 6.5). It is interesting to note that despite clinical teaching fellows having a clear interest in education and being trained to postgraduate certificate level in medical education (plus any other teacher development activities they have undertaken), there is no university strategy in place to encourage them to return to a teaching role following their specialty training.

Where role models had been identified by the research participants, they expressed very clear conceptions of what their functions were. Positive and inspirational role models were influential in clinicians developing an interest in teaching. Once in post, clinical teachers were seen as having a responsibility to act as positive teaching role models themselves, whilst seeking more senior teachers or educational managers on whom to model their own careers. The direction of travel was not perceived as being one-way though, as several participants explained how they learned new skills and approaches from more junior colleagues. This theoretical model is presented diagrammatically in Figure 47.

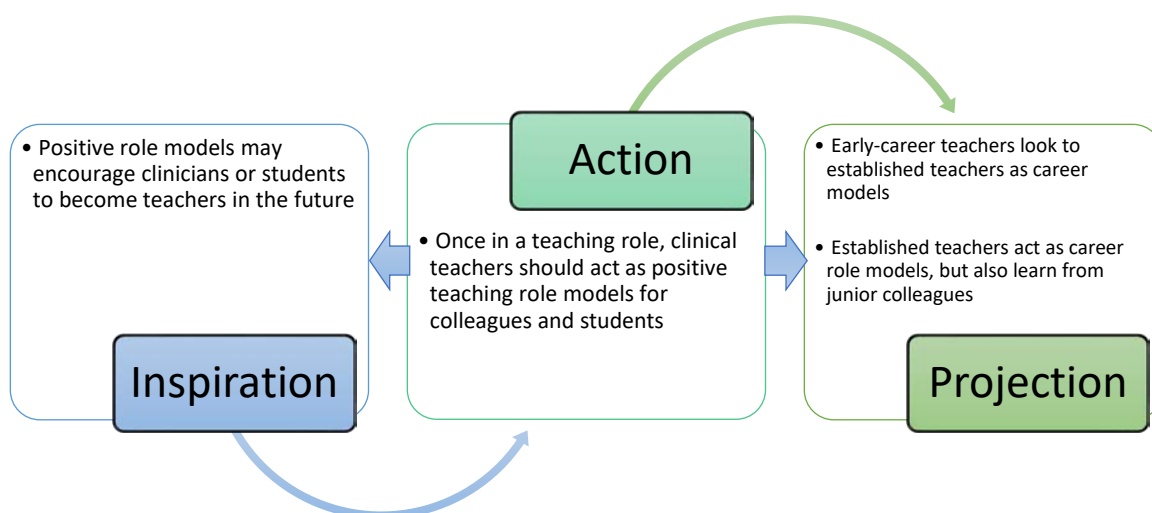


Figure 47 - Theoretical model developed to conceptualise role modelling in clinical teaching

Career role models are perceived as important for clinical teachers to plan and develop a career in medical education. However, there is widespread difficulty in identifying and accessing suitable role models. Clinical teachers want to keep an educational role but are not sure how to achieve that aim.

5.9 Towards a model of clinical teaching

The findings of this research have demonstrated that far from being separate entities, the experiences, identity, preparation, development and support of clinical teachers are actually intrinsically linked with regard to a clinical teaching position. Accordingly, a theoretical framework has been developed to illustrate the relationships between those elements and is presented in Figure 48 overleaf. Stronger links are represented by the solid lines, with weaker or secondary links being represented by dotted lines.

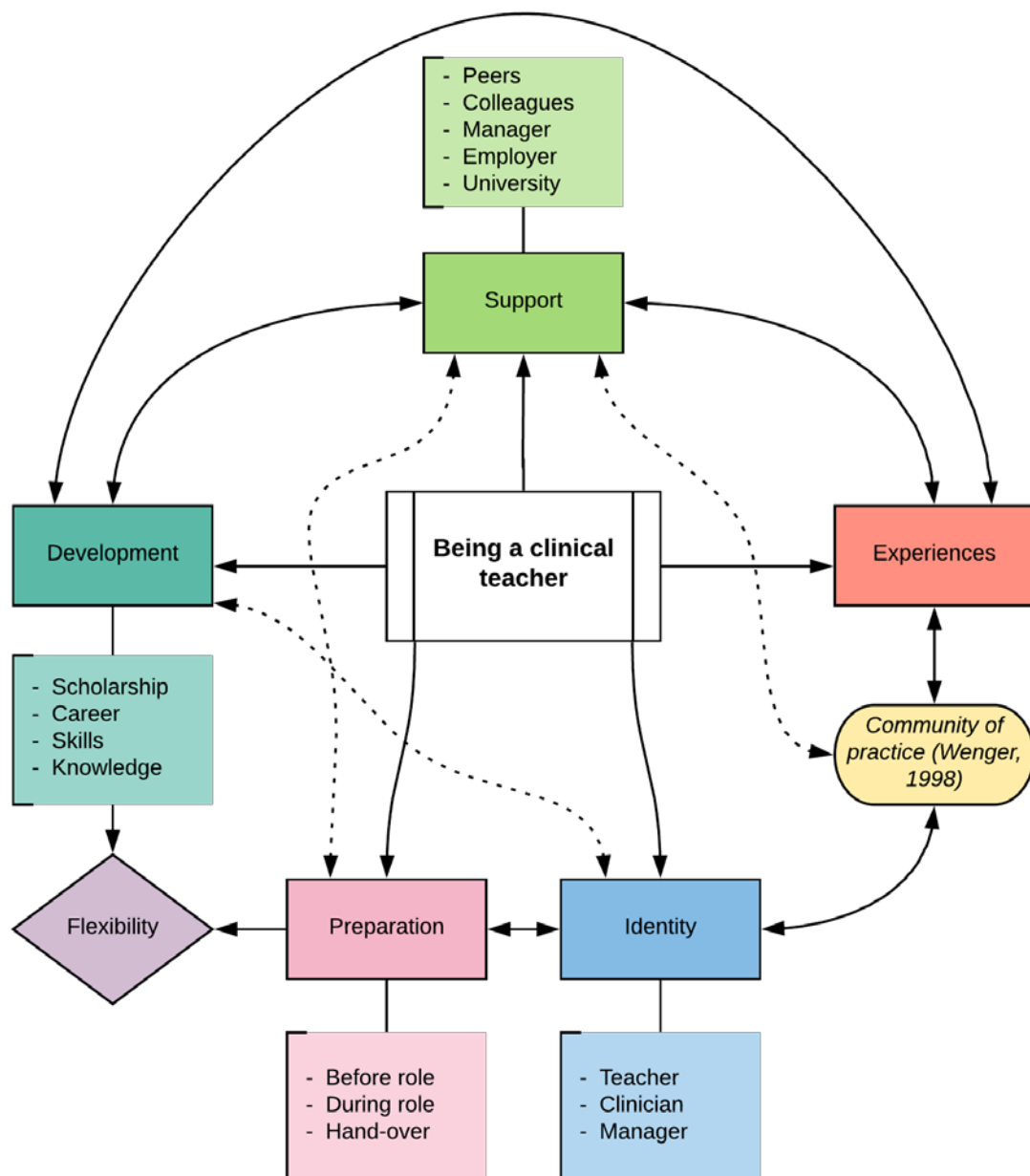


Figure 48 - Theoretical framework developed from the findings; being a clinical teacher

In relation to research question 1, teachers recognised identities of teacher, clinician and manager within the clinical teacher role. These identities were shaped by the CoP, experiences of teachers, development activities undertaken and their preparation for the role (before, during and after commencement of a clinical teacher post).

Flexibility was an important characteristic of being a clinical teacher, particularly relating to aspects of preparation and development. Development activities should be sufficiently flexible to allow clinical teachers to tailor development to their own scholarship, career, skills and knowledge needs and aspirations. This flexibility also needed to be applied to the preparation of clinical teachers. For example, preparation needs may be different for:

- Local graduates compared to doctors trained elsewhere who may not yet be familiar with the MBBS programme structure and delivery methods.
- Early career clinical teachers compared to more experienced teachers progressing into new roles which may involve more managerial responsibilities.
- Clinical teachers from medical compared to other health professional backgrounds, who have not undertaken an MBBS programme as a student themselves.
- Teachers from non-clinical backgrounds compared to clinicians, where both the nature of the eventual teaching role and prior work experience of those teachers is very different.

Support was gained from teaching peers, colleagues, managers, the employer and the university. The level and type of support needed by teachers was strongly linked to the development opportunities available to them (and how accessible they were) and their prior teaching experiences. Support was also associated with the nature of the CoP and how teachers had been prepared for a teaching role. Formal support structures were less used or perceived as necessary where teachers were working in mutually supportive educational teams made up of a variety of professionals with varying degrees of teaching experience. Participants often sought peers with similar roles for day to day support, and the lack of access to such peers was identified as a gap in their support system.

The issue of motivation is important in clinical teaching. As clinicians are not contractually compelled to engage in undergraduate teaching, in order for those clinicians to seek a formal teaching role they must be motivated to do so. This motivation must endure in order for them to remain in a teaching post. The experience of being a teacher (either positive or negative) was associated with participants desire to remain in a teaching role, and the perception of the experience was shaped by the development opportunities and support available and the CoP they inhabited.

In relation to research question 2, the interrelatedness of these key elements of a clinical teaching position and the potential variation of the role between sites, departments and universities, there is no single 'right' approach to how clinical teachers can best be motivated, supported or developed. It is therefore incumbent upon universities and NHS employers to generate an understanding of the role characteristics and development and support needs of clinical teachers delivering their undergraduate medical programme.

6 Chapter 6 - Conclusions, recommendations and reflections

6.1 Introduction

This chapter presents the conclusions to be drawn from the study, the reflections on the research process, and the implications of the research findings to both the case study institution and the wider medical education sector, contributions to knowledge, and recommendations for future research.

6.2 Research conclusions

The aim of this research was to investigate how clinical teachers experience their role and how they are prepared for and supported in that role. What has become clear from the findings of this work is that the role of a clinical teacher is not well delineated or matched between different hospitals, clinical specialties, departments or rotations, even within the same MBBS course from a single university. The role varies according to the needs of students and the nature of local NHS service delivery, and each local team comprises a different range and number of professionals from varied backgrounds with differing levels of teaching or clinical experience. These different teams function independently of one another and contain both fraternities of near-peers and firms associated with different teaching rotations or clinical specialties as described by Cantillon *et al.* (2016). The way these groups operate and the teaching identity of individuals are shaped by the CoP they form a part of, as postulated by Wenger (1998).

The teaching and clinical identities of participants were influenced by the proportion of time spent in each role, and the recognition or achievement of senior educator positions as occupied by some participants. Where participants spent a large proportion of their time in a recognised and respected teaching role, they were more likely to feel like teachers. Although there was a high (and seemingly increasing) degree of overlap between teaching and clinical roles, participants maintained separate teacher and clinician identities, almost as different 'hats' to be worn rather than different facets of the same hat.

Differences in professional background were associated with different experiences of clinical teaching and how participants identified as teachers. Clinical teachers from non-medical backgrounds (such as nursing or others where they had never been a medical student themselves) found the transition from clinician to teacher of medical students more challenging than their medically trained colleagues. This challenge was even greater for teachers from a non-clinical (in this case HCA) background, who had to become familiar with both the medical programme and the role

of a doctor alongside developing a teacher identity. An additional challenge for all teachers who were not medically trained was that their colleagues may not understand their scope of practice and expertise, which led in some cases to teachers either being asked to operate outside of their scope or else not be utilised to their full ability. Lack of respect or perceived 'lower status' was experienced by some non-medical participants from students and colleagues, as was an associated lack of confidence in teaching ability. Career pathways for clinical teachers were unclear, and suitable career role models were not easily identified or available in many cases.

Limited preparation was offered for new teachers regarding the role and responsibilities associated with clinical teaching. A single half-day induction session provided by the university was supplemented by different 'in-house' sessions provided by employers. While generally well evaluated by participants, these sessions were not always timely in offering preparation at the point that it was needed. Clinical teachers prioritised development activities differently to the university. While teachers themselves sought to develop all five areas of the teaching role as defined by the AoME (2014, p1) the university targeted the majority of their staff development offer towards the first three domains of '*designing and planning learning*', '*teaching and facilitating learning*' and '*assessment of learning*', with the final two domains of '*educational research and scholarship*' and '*educational management and leadership*' being less well represented. Perceived poor communication or people management skills were associated with the experience of feeling bullied by some participants, which would indicate that training around these areas may benefit from being reviewed. However, a set training scheme for all teachers was not proposed. Participants prioritised the ability of individual teachers to select from a range of available training opportunities to tailor their own development over a 'one size fits all' approach.

It can be concluded that clinical teaching is a complex role, operating in highly individual settings, undertaken by teachers with a wide range of backgrounds, experience and expertise. These teachers experience the role in different ways, influenced by the CoP within which they inhabit. Accordingly, the preparation and staff development needs of clinical teachers are both highly variable and individual, necessitating appropriate understanding by the university in order that suitable preparation and staff development activities are made available.

6.3 Reflections on the research process

This research has been difficult at times, but has changed me as a person, as a researcher and as an educator. This thesis is the culmination of an interest in exploring the role and experiences of clinical teachers which was first developed during my MSc research project in 2009. Undertaking a doctoral degree has allowed me to become immersed in the research and to take the time to explore the data in considerable depth. I have developed a greater understanding of the literature that underpins the clinical teacher role, which has proved particularly valuable in my own educational post.

Two years into this research my role changed; I moved from an MBBS clinical teacher engagement and support role, to become a core member of the postgraduate medical education academic team. This proved difficult, as potential interview participants identified were now part of a student group submitting work for me to grade. Accordingly, the data collection was postponed until after the students' final exam board to avoid any feeling of obligation or sense of coercion that potential participants may feel and in order to address the possible differential power dynamic (between assessor and the assessed) that may have been present if I was responsible for grading a participant's summative assessments. This meant that there was a relatively narrow window of opportunity between teaching fellows gaining their results and then leaving the local area to take up training posts at the end of their contract, making concurrent transcription and analysis demanding.

The social constructivist standpoint of this research is deemed appropriate, as the data clearly show how the identity and perceived experiences of clinical teacher participants were influenced by their CoP. The use of a case study approach allowed for the incorporation of university documentation which provided an invaluable context for the interviews, particularly around the university staff development offering, induction training and role expectations.

Being an 'insider researcher' in an outwardly facing engagement role, it was not difficult to identify and recruit a sample of participants representing different demographics, roles, backgrounds and geographical locations. However, it is acknowledged as a potential limitation of this research that not all eligible clinical teachers had an opportunity to contribute to the research. Had time, resource and word-limit constraints not been present, it may have been useful to conduct a large-scale survey in advance of the interviews, both to identify possible participants and inform the question schedule. This might be an area for development for a subsequent study.

A distinct challenge of this research was related to the difficulties in relaying potentially sensitive findings to and concerning both an organisation within which I am currently employed (the university), and my employers' strategic partners (the NHS Trusts). While the findings may be useful

to these organisations, there is also a risk of working relationships being damaged by a perception of finger pointing. A particular complication of insider research can be that the findings can make the position of the researcher unsustainable, should they reflect negatively on their employer organisation (Thomas *et al.*, 2000). I have attempted to present an authentic analysis of the research findings; my intention is that the findings will be considered by all institutions involved as valuable insights, which should be useful to inform their own developments relating to clinical teachers. In order to mitigate these difficulties, dissemination of findings to these organisations will be via a sensitively constructed report that offers key principles and conclusions without appearing to attribute blame or negativity. Such a report could be locally presented to individual institutions, prior to attending one of the existing cross-organisational meetings, to discuss the potential impact of the work more widely.

6.4 Limitations of the research

A potential limitation of thematic analysis may be that it primarily operates from a reductionist perspective, seeking to reduce the nuances of participants' thoughts, experiences and perceptions to a small number of basic themes (Lichtman, 2012). An attempt to overcome that issue was made by ensuring that a sufficiently detailed coding scheme was developed.

Other limitations of the study included:

- The inability to obtain documentary sources such as induction handouts or NHS Trust specific teacher handbooks provided to the participants by their employer, which was something that had not been anticipated. In practice, the lack of these data did not appear to impact on the research, as the participants confirmed that the documentation they had received from their employer was either existing university documentation freely available on the TSE intranet site or a slight revision of that documentation modified by the employer. As such, it can be reasonably expected that the themes generated from such documentation would not differ from those already identified, as all such university documentation available on the TSE was included in this research.
- The sampling method meant that only participants known to me as the researcher through my working knowledge were able to be approached, which meant that it was difficult to access disengaged or occasional clinical teachers. It also meant that I could only select those clinical teachers in post at the time I was working in my role, not past clinical teachers.

Future studies could counteract this issue by working with NHS employers to identify former teachers who may wish to offer their insights.

- The adoption of a case study design for this research means that the findings are inevitably directly related to the university linked to this investigation. Therefore, the context, organisational structure, service delivery, undergraduate programme and clinical teacher roles are specific to this particular setting. A consequence of this is that it may not be possible to apply these findings to other institutions due to the complex nature of educational organisations and roles.

6.5 Contribution to practice

Although my role within the university has changed during the course of this research, the findings are of great value to my own educational practice. My current role entails working closely with postgraduate students who are also clinical teachers of MBBS undergraduate medical students. This research has afforded me a greater understanding of the clinical teaching role, and the challenges which face clinical teachers in practice. I have used this insight to redevelop my teaching sessions, activities and materials to embed greater variety and address some of the challenges that participants shared. Early evaluations have indicated that this has been well received by the clinical teachers, and accordingly the findings have been cascaded to the rest of the postgraduate team to inform their teaching.

The research findings and their discussion indicate two practice interventions, which I intend to progress. The first is the development of a clinical teacher biographical database, to provide examples of how established clinical teachers have developed a career in education. This would contain biographies that represent:

- i. Teaching fellows who had a short teaching experience and then commenced specialty training.
- ii. Clinical teachers holding a senior educational role within a base unit, alongside a corresponding clinical consultant post.
- iii. Former clinicians who have left clinical roles to become full-time university teachers.
- iv. Clinical teachers from a range of professional backgrounds, including nurses, health care assistants, pharmacists and other health professionals as appropriate.
- v. Support staff involved in the delivery of medical education (including administrators and non-clinical managers) to provide a wider context to the clinical teacher role.

Initially, clinical teachers from across the regional medical school will be contacted and invited to submit a biographical account of their career in education. This could be in the form of a short video, a digi-story or a written account, for example. The first steps in such a project would be to seek institutional approval and identify appropriate policies and procedures for the storage and access requirements of the biographies, and to address issues of ongoing consent, professionalism and confidentiality. I see this as being my next project, following completion of this thesis.

I have taken the first step towards extending this project beyond the regional medical school by speaking to the Director of Special Projects for the Association for the Study of Medical Education (ASME). They indicated that they consider that this would be a project that ASME could support and would be personally willing to support a small grant funding application to assist in the national roll out and development of such a resource. I have joined the newly formed ASME special interest group for postgraduate medical educators and have submitted a proposal to present my research findings at their inaugural meeting, in March 2019. At this meeting I will attempt to garner their support and assistance regarding ongoing national development of the clinical teacher biographical database.

I also am a member of the technology enhanced learning (TEL) special interest group at ASME. The Chair of this group has offered to support the clinical teacher biographical database by providing access via the ASME account to an online platform (OneHE) to host the database electronically. OneHE is a global network of educators from a range of disciplines who seek to share ideas, solve common challenges and inspire one another, which aligns well with the aim of the biographical database.

An adjunct to this project may be to investigate possible incentives the university could offer to encourage former teaching fellows to resume involvement in undergraduate education following their specialty training. It is difficult to know (and outside the scope of this research) without further investigation whether this is something that had been considered previously by the university, and what measures may be implemented in the event that institutional support is gained for such a project. If successful, the opportunity for innovative shadowing or mentorship opportunities may be indicated, which would articulate well with the biographical database previously described.

The second proposal is that the university should seek to provide opportunities for non-medically trained teachers to identify similar colleagues from across the regional medical school, to engage in professional development and for them to promote their role and expertise. This could be achieved by implementing three new strategies:

1. Establishment of a regional **special interest group** for clinical teachers from non-medical backgrounds to facilitate professional networking and identification of relevant career role models. As an adjunct to this local initiative, a proposal for the establishment of a national group has been prepared, and is to be submitted for consideration by ASME, at their annual board meeting in November 2018.
2. An informal **staff development session** offered each year specifically aimed at non-medically trained teachers. This session could usefully comprise of two sections, attended all day for new teachers, or in the afternoon only for more experienced teachers:
 - i. Morning - an overview of undergraduate medical training (for those new to post)
 - ii. Afternoon - a bespoke staff development session (different each year) to support the development of a particular teaching skill for example. The special interest group suggested previously could propose the topic for this session.
3. A dedicated **break-out session at the biennial clinical teaching forum**, where content would be specifically aimed at non-medically trained clinical teachers. This strategy would have the additional benefit of encouraging these teachers to attend this event, where they might also present posters and network with colleagues from both the university and across the regional medical school. It would also signify to all staff that these teachers hold an important and valued role in the clinical education team and are recognised by the university as such.

The wider implications for this research are potentially significant. A wider roll-out of the clinical teacher biographical database across other institutions (for both searching and contributions) could offer clinical teachers from across the UK a source of searchable and representative career role models to inform their own career plan. This may prove a useful link between trained and experienced teaching fellows leaving a one-year post, and their return to an educational role following specialty training. At present, there is no such 'retention strategy' for teaching fellows. This research also offers a greater understanding of the role that non-medically trained clinical teachers play within the wider educational team and could be a useful starting point when considering how these roles are created and developed in the future.

6.6 Contribution to knowledge

This thesis presents several original contributions to knowledge regarding the experience of the teaching role, identity, support and development of clinical teachers of undergraduate medical students. These contributions have been distilled as follows:

- **Role** - Eight overarching principles that underpin the clinical teaching role were identified which offer a useful guide for those responsible for educational managers to ensure that they provide clinical teaching roles which are fulfilling and motivating for teachers. Whatever their role or professional background, once in post clinical teachers should have a good understanding of the roles and capabilities of other educational staff to facilitate appropriate performance of the educational team.
- **Identity** - Student interactions have a potentially powerful impact on clinical teacher identity, and whether teachers view their experiences as positive or negative. The role of an '*alternative pragmatic identity*' in clinical teacher identity development was pinpointed and related to the current uncertainty regarding the NHS system and political climate. Finally, a theoretical model was proposed (see section 5.8, Figure 47), to conceptualise the nature of role modelling in clinical teaching.
- **Staff preparation and development** – The preparation of clinical teachers is a lengthy continuum rather than something that happens only at the commencement of a clinical teaching post. The staff development offer for clinical teachers should be both adaptable and universally marketed, with a specific engagement strategy aimed at clinical teachers from non-medical professional backgrounds. There is a shortage of appropriate career role models for clinical teachers, with some specialties and professional backgrounds not having any identifiable role models at all.
- A **model of clinical teaching** was developed to illustrate the findings of this research (see section 5.9, Figure 48) and demonstrate the interactions and connections between the key aspects of the clinical teacher role investigated (support, experiences, identity, preparation and development).

6.7 Recommendations for future research

It would be beneficial to replicate this study in other universities or NHS trusts to see if the findings reported here are applicable in other universities with different structures for clinical education. These research projects would ideally comprise of an initial survey cascaded to the whole population of clinical teachers to inform the interview schedule, followed by interviews with several clinical teachers. Within the research write up, clear information about curriculum type and requirements of the different providers should be included, to facilitate comparison of the findings to other populations. This research should seek to investigate staff development provision and perceived requirements, the nature of the clinical teacher role and reported experiences of a range of clinical teachers.

Should the clinical teacher biographical database be developed, further research to evaluate its utility could be undertaken. It would be essential to investigate how such a database is used, and whether it influences the career path or is a resource to support those already in a teaching role. This research may also generate new ideas for the promotion of clinical teaching roles and offer suggestions for how the database may be supplemented or improved.

Another potentially worthwhile research project would be to explore the generic role of a clinical teacher with a view to identifying different 'levels' within that role. While teaching fellows in a one-year post may be primarily focussed on teaching and assessment, this research highlighted that teachers that are senior sought additional challenges in and advancement of their teaching role, such as educational leadership or scholarship. Given the clear lack of role models for teaching careers, a framework to illustrate how a teaching role may develop over time could provide teachers with targets to aspire to. Such a project could also influence the biographical database previously described and offer a way of 'grouping' experiences in relation to seniority, teaching expertise and specialty.

Challenges in identity formation of clinical teachers from non-medical backgrounds were highlighted by this project, but it was outside the scope of this research to explore the issue in detail. There are relatively few non-medically qualified clinical teachers within the region, so in order to gain a greater insight into the process, barriers and facilitators of teaching identity formation in this context it would be necessary to extend the geographical boundaries of the study to include participants working in other locations. This is another area where collaboration with other institutions may prove advantageous, but a concurrent collection of contextual data would be necessary to ensure that meaningful data comparisons could be made.

In conclusion, the findings of this research have important implications for how clinical teachers are prepared, supported and developed. If HEIs and NHS employers are better able to understand the relationships between the identity, experiences and development of clinical teachers, then they will be better placed to match the real needs of clinical teachers in terms of the 'university offer' of staff training programmes and teacher support initiatives.

Unequivocally, the development of teachers is of value to educational teams. Although teaching is a fundamental role of a clinician, we must be cognisant that the primary role is to provide patient care. In the current climate of competing agendas, the complex relationship between clinical teaching and clinical provision must be maintained. Stull and Duvivier (2017) highlighted the quantifiable improvement in patient outcomes which result from developing coherent links between clinical practice and teaching practice. Unquestionably, these two critical responsibilities are related to both improved education and enhanced patient care and must be considered as a vital element of any health profession.

7 References

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8 Appendices

8.1 Appendix 1 – Summary of literature pertaining to the role of the clinical teacher

Code	Year	Author(s)	Methods and methodology	Key findings
R1	2016	Van der Leeuw <i>et al.</i>	Evaluation data collected from 422 residents on 385 clinical teachers from 20 hospitals. Validated formative feedback system used (System for Evaluation of Teaching Qualities).	Feedback comments often lacked specific phrasing which limited the value for performance improvement. Five main categories of desired improvements were made: 1. Teaching skills 2. Teaching attitudes 3. Personal characteristics 4. Embedded positives (positive comments on teaching performance) 5. Other (such as medical competencies and teaching performance as part of a team).
R2	2016	Jacobs <i>et al.</i>	Individual interviews with 13 teachers of undergraduate programmes in two medical schools, regarding personal characteristics required by medical teachers.	Five main personal attributes were reported: 1. Agency 2. Experience with PBL curriculum (as a learner or a teacher) 3. Personal development 4. Motivation and work engagement 5. High content experience
R3	2015	Görlitz <i>et al.</i>	Consensus process under leadership of the German Society for Medical Education.	Six competency fields were defined: 1. Educational action in medicine 2. Learner-centeredness 3. Social and communicative competencies 4. Role modelling and professionalism 5. Reflection and advancement of personal teaching practice 6. Systems related teaching and learning
R4	2013	Singh <i>et al.</i>	Likert questionnaire relating to perceived qualities of clinical teachers of medicine	The top three desirable qualities of an effective clinical teacher were: 1. Knowledge of subject 2. Enthusiasm

Code	Year	Author(s)	Methods and methodology	Key findings
			and dentistry completed by 57 faculty members in a single educational institution.	3. Communication skills More experienced faculty behaviour / instructional delivery more highly than more novice colleagues did.
R5	2011	Hatem <i>et al.</i>	Working group from North America, tasked with defining the desirable knowledge, skills and attitudes of medical teachers at all levels of the curriculum.	<p>The attitudes and attributes, skills and knowledge of competent teachers were defined as:</p> <p>1. Attitudes and attributes</p> <ul style="list-style-type: none"> - Recognises that effective learning and understanding is a result of effective teaching - Educational advocate - Believes in a code of ethics for medical teachers - Shows passion for teaching - Kind in all interactions - Aware of own limitations - Accessible to learners - Stimulates curiosity - Seeks and obtains knowledge about learners - Creates safe learning environment - Is an effective role-model. <p>2. Skills:</p> <ul style="list-style-type: none"> - Communicates relevant knowledge effectively - Demonstrates leadership - Shows skill in facilitating small and large group teaching sessions - Questions, responds and listens effectively - Establishes learning community that values lifelong learning and education - Forms educational contract between learners and teachers - Give praise and critical feedback - Reflective and mindful

Code	Year	Author(s)	Methods and methodology	Key findings
				<ul style="list-style-type: none"> - Captures and maintains student attention - Adaptable and flexible - Promotes critical thinking - Promotes self-directed learning - Gives summative evaluations at the right time - Uses information technology well <p>3. Knowledge:</p> <ul style="list-style-type: none"> - Aware of and utilises basic pedagogical principles - Uses teaching techniques in line with current neuroscience and cognitive psychological findings - Has up to date knowledge of discipline - Promotes scholarship
R6	2011	Srinivasan <i>et al.</i>	Working group proposals, refined by conference presentations and expert opinions.	<p>Six core competencies for clinical teachers were identified:</p> <ol style="list-style-type: none"> 1. Medical (or content) knowledge 2. Learner centeredness 3. Interpersonal and communication skills 4. Professionalism and role-modelling 5. Practice-based reflection 6. Systems-based practice <p>Four additional competencies for educators with additional programme-related roles were proposed:</p> <ol style="list-style-type: none"> 1. Programme design / implementation 2. Evaluation / scholarship 3. Leadership 4. Mentorship
R7	2011	Van Roermund <i>et al.</i>	Qualitative study, where 28 teachers from two departments of postgraduate	<p>Six themes emerged from the data:</p> <ol style="list-style-type: none"> 1. Professional identification – teachers liked the concept of ‘group coach’, in the sense that

Code	Year	Author(s)	Methods and methodology	Key findings
			medical education were interviewed about their perceptions of 'the good teacher'.	<p>the teacher is a wiser and more experienced colleague</p> <ol style="list-style-type: none"> 2. Relationship with trainees – a caring coach 3. Learning to be a teacher – learning by doing and from colleagues 4. Knowledge – practical knowledge and experience about group dynamics 5. Motivation to teach – motivated by seeing trainees grow, and by having time away from clinical work 6. Change – changes often imposed by others. This makes it difficult for the teacher to know what they should be / should not be doing.
R8	2010	Kisiel, Bundrick and Beckman	Phenomenological approach, using focus groups to explore effective outpatient teaching with eleven third-year internal medicine residents.	<p>Three main themes, and 12 sub-themes (in brackets) were identified:</p> <ol style="list-style-type: none"> 1. Interpersonal (kindness and sensitivity, teacher-learner relationships and personality and style) 2. Clinical teaching (delivering content as opposed to discussion, modelling self-directed learning, feedback, autonomy, expertise and diagnosing the learner). 3. Efficiency (irrelevant teaching, preferential staffing and general efficiency issues).
R9	2010	Huwendiek <i>et al.</i>	Web-based survey completed by 860 participants from 76 countries, who were on the Association for Medical Education in Europe (AMEE) mailing list. Qualitative analysis of free text comment was undertaken.	<p>Respondents rated their expertise in medical education in 12 domains (listed in order, with the highest ranked first):</p> <ol style="list-style-type: none"> 1. General principles of teaching. 2. Communication skills (such as giving feedback) 3. Assessment of students 4. Stimulating self-directed learning 5. Curriculum development 6. Mentoring 7. Curriculum and course evaluation 8. Tutor training

Code	Year	Author(s)	Methods and methodology	Key findings
				9. Facilitating problem-based learning 10. Technical skills training 11. Medical education research methods 12. Development and use of computer-based training
R10	2009	Duvivier <i>et al.</i>	Ten clinical teachers were interviewed to ascertain their perceptions of desired teacher qualities, strategies and competencies.	Key themes emerged for each category: 1. Qualities (desire to teach, sense of humour, aware of own limitations, respect student limitations, role model). 2. Competencies (comprehension of the knowledge and prior experience of students, knowledge of the curriculum and insight into educational backgrounds). 3. Strategies (able to adapt teaching, encouraging questions, providing feedback, guard , wider perspectives of differential diagnosis and underlying pathology and stimulate contextual learning).
R11	2008	Yeates, Stewart and Barton	38 regional panellists participated in a modified Delphi technique to establish the skills, practices and attributes core to the clinical teaching role.	Four statement categories of the clinical teacher role emerged from the analysis: 1. Preparing to teach 2. Delivery of teaching 3. Teacher conduct 4. Supporting activities
R12	2007	Alweshahi, Harley and Cook.	84 final-year medical students completed a questionnaire to explore their perspectives of the characteristics of effective clinical teachers.	Personal characteristics of teachers: - Be a junior doctor / be a senior doctor / have an academic rank. - Speak the native language fluently / be a national. - Be of a particular gender (equal preference for male or female doctors). Teaching approach: - Be a good listener. - Be approachable. - Use humour during teaching.

Code	Year	Author(s)	Methods and methodology	Key findings
				<ul style="list-style-type: none"> - Remember student and patient names, and use them. - Be a good communicator, using simple and clear language. - Provide information. - Give constructive feedback. <p>Supporting professional development:</p> <ul style="list-style-type: none"> - Highlight further areas of learning in relation to patients. - Respect patient confidentiality. - Encourage critical thinking. - Teach how to write good patient notes. - Consider psychosocial aspect of illness. - Remind of upcoming exams. - Refer to patient by illness.
R13	2006	Chitsabesan <i>et al.</i>	Semi-structured interviews (22) and repertory grids (19) with consultants, nurse lecturers, undergraduate students and patients to elicit desired characteristics of clinical teachers.	<p>Six themes emerged:</p> <ol style="list-style-type: none"> 1. Teacher characteristics (rapport, style, enthusiasm and role model). 2. Teacher abilities (engage and knowledge). 3. Teaching delivery (feedback, structure, involved, supervision, questioning style and listening). 4. Lesson planning (organisation and preparation). 5. Lesson content (learners' needs, clinical and relevance). 6. Lesson related (environment and timing).
R14	2005	Buchel and Edwards	15 teaching attributes were ranked in order of importance for clinical teachers, by residents and faculty at eight family medicine residency programmes.	<p>In order of importance (by both groups combined), the attributes were:</p> <ol style="list-style-type: none"> 1. Clinical competence 2. Non-judgemental 3. Role model 4. Enthusiasm 5. Feedback skills 6. Availability

Code	Year	Author(s)	Methods and methodology	Key findings
				7. Respects residents' autonomy 8. Clarity 9. Sincerity 10. Evidence-based medicine 11. Listening skills 12. Professionalism 13. Organisation skills 14. Well-prepared 15. Scholarly activity
R15	2001	McLean	Individual interviews conducted with 32 second-year medical students	Nine attributes of the 'good' clinical teacher were identified: 1. Good communicator 2. Expert / knowledgeable about subject 3. Enthusiastic / interest in subject 4. Approachable 5. Willing to help / helpful 6. Friendly 7. Patient / tolerant 8. Understand / relate to students 9. Sensitive to student needs / problems
R16	2000	Harden and Crosby	12 roles of the clinical teacher identified from three sources (implementation of medical curriculum in one medical school, 12 student diaries and from the literature).	12 roles of the clinical teacher were summarised under six main categories: 1. Information provider (lecturer and clinical / practice teacher) 2. Role models (Teaching and on-the-job). 3. Facilitator (mentor and learning facilitator). 4. Assessor (curriculum evaluator and student assessor). 5. Planner (curriculum planner and course organiser). 6. Resource developer study guide producer and resource material creator).
R17	1994	Ullian, Bland and Simpson	Content analysis of comment forms completed by 268 residents about 490 clinical teachers in a	Four main roles of the clinical teacher were identified: 1. Physician (knowledge, clinical competence, role model, approach to patient care, attitudes towards medicine).

Code	Year	Author(s)	Methods and methodology	Key findings
			five-year period at a large family practice residency.	<p>2. Supervisor (provides opportunities to take responsibility and undertake procedures, involves and supervises resident).</p> <p>3. Teacher (committed, available, provides explanations, discusses and answers questions).</p> <p>4. Person (support, easy and fun to work with, amiable).</p>
R18	1994	Irby	In-depth interviews with six distinguished clinical teachers.	<p>Six essential domains of knowledge for the clinical teacher were identified:</p> <ol style="list-style-type: none"> 1. Knowledge of patients 2. Knowledge of medicine 3. Knowledge of context 4. Knowledge of learners 5. Knowledge of general principles of teaching 6. Knowledge of case-based teaching scripts

8.2 Appendix 2 – Summary of literature pertaining to the experiences of CTs

Code	Year	Author(s)	Methods and methodology	Key findings
E1	2017	Steinert, Basi and Nugus.	Focussed ethnographic study conducted within three hospitals attached to a single medical school.	Three core themes were identified: <ul style="list-style-type: none"> - Clinical work and teaching are interconnected, and embedded within the hospital routine. - A multiplicity of teachers, with no single person responsible for all teaching. - Teaching space and resources either enable or constrain teaching.
E2	2015	Arabshahi <i>et al.</i>	Semi-structured interviews with nine clinical teachers regarding their experiences of clinical teaching, analysed using the Collaizzi method.	Three major themes were identified: <ol style="list-style-type: none"> 1. Factors relating to the educational triad of patient, student and clinical teacher. <ul style="list-style-type: none"> - Concern about patient welfare - Poor preparation - Ethical problems - Lack of motivation 2. Factors relating to the management of education within the clinical environment. <ul style="list-style-type: none"> - Poor arrangement and organisation of resources. - Poor monitoring of educational systems. - Inadequate resources. - Bad planning. 3. Factors relating to the educational environment. <ul style="list-style-type: none"> - Stressful environment. - Humiliation. - Poor communication.
E3	2014	Norman and Dogra.	518 clinical teacher participants completed an electronic survey	<ul style="list-style-type: none"> - Most respondents had staff development training in teaching and learning, but far fewer had similar training in student support. Fewer still had formal postgraduate training, with the fewest number progressing to a higher degree. - Uncertainty about teaching time allocated, and more likely to do additional hours in

Code	Year	Author(s)	Methods and methodology	Key findings
				<p>undergraduate rather than postgraduate training.</p> <ul style="list-style-type: none"> - Teachers felt well prepared for teaching, but this was done in their own time, as formal time allocation was inadequate. - Low levels of satisfaction with resourcing and available time (particularly for feedback). - Peer feedback on teaching was useful, but fewer opportunities than for student evaluation. - Undergraduate teaching was perceived as holding less organisational esteem than postgraduate training. - Barriers to teaching included conflict between clinical and teaching responsibilities, lack of time, lack of formal recognition, staffing shortages and lack of support.
E4	2011	Sturman, Régo and Dick.	<p>60 clinical teachers from General Practice were individually interviewed about their experiences of clinical teaching. Thematic analysis was conducted.</p>	<p>Themes relating to rewards and costs / challenges of teaching were identified.</p> <p>Rewards:</p> <ul style="list-style-type: none"> - Intellectual stimulation. - Satisfaction of teaching. - Being in the company of enthusiastic young students. - Being exposed to students' knowledge. - Being able to promote general practice. - Fulfilling an obligation to teach. - Advantageous to patients involved in teaching. <p>Costs and challenges:</p> <ul style="list-style-type: none"> - Time management.

Code	Year	Author(s)	Methods and methodology	Key findings
				<ul style="list-style-type: none"> - Concerns about patients. - Mental fatigue. - Challenges integral to clinical teaching. - Adverse student factors. - Exposure of general practice.
E5	2010	Peadon, Caldwell and Oldmeadow.	24 paediatrician clinical teachers participated in interviews and focus group discussions to explore their attitude to teaching.	<p>Participants generally enjoyed teaching, and teacher relationships with learners was a major influence on this enjoyment.</p> <p>Factors influencing attitude to teaching were identified at three levels:</p> <ol style="list-style-type: none"> 1. Consultants – time commitments, knowledge of course, confidence in course, comfort with topic and teaching format. 2. Learners – level of knowledge, attendance, enthusiasm and interest, cultural changes. 3. Institutions – acknowledgement, communication, teaching support, resources and attitude to teaching.
E6	2008	Arena, Arnolda and Lake.	24 clinical teachers from a single hospital took part in two focus groups to ascertain their attitudes to teaching.	<p>13 themes were generated by the focus groups:</p> <ol style="list-style-type: none"> 1. Teachers like teaching and want to teach. 2. Assessment amount and type are appropriate. 3. Insufficient time to combine teaching, administration and clinical care effectively. 4. Satisfaction with the type of teaching being undertaken. 5. Desire to improve integration between clinical areas. 6. Poor communication from university regarding expectation of teachers. 7. Teaching enjoyment not improved by curriculum changes. 8. Assessment implementation assistance would be appreciated.

Code	Year	Author(s)	Methods and methodology	Key findings
				<p>9. Poor university communication about the programme.</p> <p>10. The internet should have a more prominent role in teaching.</p> <p>11. Do not feel rewarded for teaching.</p> <p>12. Students not well prepared for clinical teaching.</p> <p>13. Unreasonable teaching load.</p>
E7	2007	Higgs and McAllister.	Phenomenological approach and narrative enquiry. Five speech-therapy clinical teachers were interviewed 7-14 times to explore their lived experience of being a clinical teacher.	<p>A model of the lived experiences of clinical teachers was developed, comprising of six dimensions:</p> <ol style="list-style-type: none"> 1. A sense of self-identity. 2. A sense of relationship with others. 3. A sense of being a clinical teacher. 4. A sense of purposeful action / agency. 5. Seeking balance, self-congruence and sense. 6. Experience of growth and change.
E8	2007	Lawson	National study of clinical teachers in Australia. Multiple study designs, incorporating the views of 3547 respondents.	<p>Five overarching principles were drawn from the analysis:</p> <ol style="list-style-type: none"> 1. Teaching spaces can be crowded, resulting in simulation separating students from patients. 2. Teachers feel removed from the wider educational system. 3. Working and teaching in isolation can make calibration across students difficult, and result in poor teacher practices remaining unchallenged. 4. Teachers concerns unheard. 5. Concerns about the quality of medical education.
E9	2006	Reck <i>et al.</i>	109 dermatology residents completed a survey to ascertain their views on an academic career.	<p>An overall lack of interest in an academic career was identified, and attributed to four main factors:</p> <ol style="list-style-type: none"> 1. Bureaucracy. 2. Financial reasons.

Code	Year	Author(s)	Methods and methodology	Key findings
				<p>3. Lack of available career guidance or mentorship.</p> <p>4. Practice environment or location.</p>
E10	2005	Hendry <i>et al.</i>	249 clinical teachers from four hospitals working with a single medical school completed a postal questionnaire. Free text responses were grouped by theme.	<p>Four broad experiential themes emerged:</p> <ol style="list-style-type: none"> 1. Curriculum organisation and infrastructure may affect the quality of clinical teaching. 2. Students insufficiently prepared for clinical practice. 3. Being a teacher: identity, reward and self-worth. 4. Consultant concerns – important to validate.
E11	2002	Busari <i>et al.</i>	Ten residents were interviewed about their perceptions of the clinical teacher role. Thematic analysis was undertaken.	<p>A number of emergent themes were identified:</p> <ul style="list-style-type: none"> - Proficiency important to ensure effective teaching (Teaching, feedback, attitude to teaching, experience and time). - Teaching is a prime responsibility. - Teaching skills programme should be incorporated into surgical residency. - Time is important (but can be 'found' by the motivated teacher). - Residents better at identifying with students, but consultants are more experienced and knowledgeable. - Teaching makes residents better clinicians. - Departmental emphasis on teaching increased awareness of teaching and its' benefits. - Objective evaluation of teaching welcome. - Recommendations for the improvement of teaching included literature on teaching, training workshops, evaluation and feedback, interactive sessions with experts, training (to include how to present information, transfer knowledge, explain concepts and give feedback).

Code	Year	Author(s)	Methods and methodology	Key findings
				<ul style="list-style-type: none"> - Residents position in education can be undermined by senior colleagues. - Support of colleagues and employer / institution considered vital.

8.3 Appendix 3 – Summary of literature review pertaining to identity

Code	Year	Author(s)	Methods and methodology	Key findings	Theme(s)
Id1	2018	Riveros-Perez and Rodriguez-Diaz	Phenomenographic analysis of interviews conducted with 12 clinical teachers from three medical schools in Colombia.	Four patterns identified to describe the continuum of clinical teachers gaining a teacher identity: 1. Clinician identity and preparation for change (teaching and clinical work conducted in the same way). 2. Educator identity and preparation for change (elements of educator identity beginning to emerge). 3. Clinician identity and action (elements of clinician identity still apparent in teaching, but awareness of need to develop). 4. Educator identity and action (showing elements of educator identity in teaching, and have identified the complexities of teaching / educational pedagogy).	Teacher identity adopted as a result of teacher development activities
Id2	2018	Sethi <i>et al.</i>	Constructivist grounded theory study. Interviews conducted with 27 graduates from one post-graduate medical education programme in the UK.	Qualification in medical education conferred perceived legitimacy on participants' educational roles. Increased sense of belonging to the medical education community after achieving qualification.	Teacher identity adopted as a result of teacher development activities

Code	Year	Author(s)	Methods and methodology	Key findings	Theme(s)
				Completion of a dissertation conferred the identity of educational researcher.	
Id3	2017	Steinert <i>et al.</i>	Focused ethnographic study of three general internal medicine teams affiliated with one Canadian medical school.	<p>Clinical work and teaching are interconnected.</p> <p>The boundaries between the teaching and clinical roles were frequently blurred.</p> <p>Patient care (the clinician) would always take priority over teaching responsibilities (the teacher)</p>	Blurred boundaries between teaching and clinical identities
Id4	2017	van Lankveld <i>et al.</i>	Interpretivist epistemological study. Interviews conducted with 17 early-career medical teachers affiliated with a Dutch medical school.	<p>Half of the participants experienced tensions in the process of incorporating the teacher identity into their clinical identity.</p> <p>Five narratives identified that participants used to integrate the teacher role into their own identity:</p> <ol style="list-style-type: none"> 1. Coalition between teaching and other roles. 2. No integration of teaching into the other role. 3. The teaching and other role were constructed as opposing positions. 4. Coalition between the role of teacher and coordinator. 5. Trivialising the role of status 	<p>Hierarchy, credibility and identity</p> <p>Barriers to adopting teacher identity</p> <p>Teacher identity adopted as a result of teacher development activities</p>

Code	Year	Author(s)	Methods and methodology	Key findings	Theme(s)
Id5	2016	Cantillon <i>et al.</i>	Constructivist interpretivist study in a teaching hospital adjacent to a medical school in Ireland. 14 participants were interviewed.	<p>Large degree of congruence of how participants described their teaching identity.</p> <p>Communities of practice:</p> <ol style="list-style-type: none"> 1. Horizontal (professional) plane – firms (clinical teams) and fraternities (communities of junior doctors). 2. Vertical (managerial) plane – healthcare institutions (hospitals and clinics) and medical schools. <p>Becoming a clinical teacher is a social process of becoming recognised as a competent person in relation to planes of accountability.</p> <p>Teacher practice and identity represent the negotiation of the political landscape by that teacher.</p>	Identity as a social construct
Id6	2015	Hu <i>et al.</i>	Interviews conducted with 44 lead and early career clinical teachers from twenty-one Australian and New Zealand medical schools.	<p>Gradual realisation that education was aligned to personal interests.</p> <p>‘Shared habitus’ developed by interacting with other clinical teachers with similar interests. These interactions promoted the emergence of an ‘educator’ identity.</p>	<p>Identity as a social construct.</p> <p>Alignment with personal ethos and sense of ‘self’</p>

Code	Year	Author(s)	Methods and methodology	Key findings	Theme(s)
Id7	2014	Sabel <i>et al.</i>	Phenomenological analysis of nine focus groups (34 participants) with early career medical teachers and six interviews with senior medical educators in the UK.	<p>Many participants experienced dual identity career crisis resulting from tensions between the primary role of clinician / scientist and their role as an educator. In all cases, the educator identity was secondary.</p> <p>Important to retain a clinical identity in order to maintain credibility as a teacher.</p> <p>The nature of the clinical teaching role and career pathways are unclear.</p>	<p>Barriers to adopting teaching identity.</p> <p>Hierarchy, credibility and identity.</p>
Id8	2014	Bartle and Thistlethwaite	Socio-cognitive career theory. Interviews conducted with 12 participants (out of 32) teaching fellows in Australia.	<p>Identities were variable, and depended on the context of what they were doing at the time. Research was a less important component of identity than teaching or clinical practice.</p> <p>Important to retain a clinical identity in order to maintain credibility as a teacher.</p> <p>The nature of the clinical teaching role and career pathways are unclear.</p>	<p>Hierarchy, credibility and identity.</p> <p>Barriers to adopting teaching identity.</p>
Id9	2012	Maxwell <i>et al.</i>	Critical realist multiple case study design within two NHS acute hospital	Four major workplace identities were discovered – professional, speciality, organisational and relational.	Identity as a social construct

Code	Year	Author(s)	Methods and methodology	Key findings	Theme(s)
			trusts in England, and two new nursing roles. 21 semi-structured interviews were conducted, followed by observations of committees (n=11) and participants at work (n=9), and analysis of organisational documents (n=33).	Different role types were found to develop different social identities as a result of different drivers.	
Id10	2011	Mitchell <i>et al.</i>	Survey data was collected from 47 inter-professional teams in a tertiary referral hospital in Australia.	<p>Team identity moderates the relationship between team diversity and effectiveness; commitment and desirability of the team enhanced cooperation between members.</p> <p>Threat to professional identity are harmful, and facilitate an inverse relationship between diversity and effectiveness.</p> <p>Promoting a strong and shared team identity and reducing identity threat can enhance the effectiveness of inter-professional teams.</p>	Identity as a social construct
Id11	2011	Cahan <i>et al.</i>	Survey of 92 faculty and residents (75% of total) in a single medical programme in the USA.	Curricular focus on human factors can strengthen teacher identity.	Hierarchy, credibility and identity.

Code	Year	Author(s)	Methods and methodology	Key findings	Theme(s)
Id12	2009	Lown <i>et al.</i>	Qualitative analysis of 40 interviews with clinical teachers (from a variety of disciplines) who had completed a year-long fellowship in medical education in the USA.	<p>Identity was the second most commonly coded theme of eleven (after ‘the understanding and application of concepts and skills’).</p> <p>Fellowship developed participant’s identities of being a medical educator. For some, this identity was pre-existing or emerging to some extent. Identity evolved over time.</p> <p>Empowerment and self-efficacy improved.</p> <p>Participants identified as ‘change agent’, leader, innovator and collaborator.</p>	<p>Teacher identity adopted as a result of teacher development activities.</p> <p>Hierarchy, credibility and identity.</p>
Id13	2007	Higgs and Mcallister	Phenomenological study. Interviews with five clinical teachers from a speech pathology programme in Australia.	<p>Identity of clinical teacher developed through student years, professional career and clinical teacher experiences.</p> <p>Identity as practitioners either replaced or supplemented by learning to teach and adopting the clinical teacher identity.</p> <p>Two ‘dimensions’ of identity – the self, and relationships with others were important to the perception of being a clinical teacher.</p>	Identity as a social construct.
Id14	2003	Starr <i>et al.</i>	Systematic content analysis of focus	Participants characterised their identities as clinical	Teacher identity

Code	Year	Author(s)	Methods and methodology	Key findings	Theme(s)
			groups conducted with 35 experienced community physician clinical teachers in the USA.	teachers in seven key emergent themes: 1. Intrinsic satisfaction 2. Importance of external rewards 3. Skills and knowledge in teaching 4. Perceived value of social groups 5. Integration of educator/clinician identities 6. Sense of expertise in their clinical area 7. Responsibility to teach	adopted as a result of teacher development activities. Identity as a social construct Hierarchy, credibility and identity. Alignment with personal ethos and sense of 'self'
Id15	2002	Stone <i>et al.</i>	Interviews with ten physician clinical teacher participants associated with five medical schools in the USA.	Four elements of teacher identity emerged from the interviews: 1. Familiarity with the principles and practices of adult education. 2. An underlying humanitarianism. 3. The image of the self as a teacher. 4. Understanding of both positive and negative aspects of teaching.	Teacher identity adopted as a result of teacher development activities. Alignment with personal ethos and sense of 'self'

8.4 Appendix 4 – Summary of literature pertaining to preparation and support of CTs

Code	Year	Author(s)	Methods and methodology	Key findings	Theme(s)
PS1	2016	Bigbee, Rainwater and Butani.	156 nursing and medical faculty and administrative staff were surveyed about their perceived needs regarding curriculum and delivery of an interprofessional faculty development programme.	<p>Topic area rankings in order of perceived importance were:</p> <ol style="list-style-type: none"> 1. Providing effective feedback 2. Strategies for clinical teaching 3. Evaluation and assessment of learners and programmes 4. Curriculum and syllabus development 5. Innovative classroom teaching strategies 6. Mentoring others 7. Stimulating lifelong learning 8. Educational research and scholarship 9. Using educational technology and simulation 10. Academic career planning 11. Academic leadership development 12. Work-life balance for faculty 13. Interprofessional education 14. Working with diverse students 15. Test construction and evaluation 	

Code	Year	Author(s)	Methods and methodology	Key findings	Theme(s)
				16. Distance/ e-learning education approaches 17. Incorporating equality and diversity in health professions education 18. Accreditation processes / requirements 19. Educational theories 20. Mentoring dissertation / thesis students.	
PS2	2012	Montero <i>et al.</i>	Semi-structured interviews with seven faculty members to identify barriers to development. Grounded theory, analysed using open, axial and selective coding.	Three categories of barriers were identified from the analysis: 1. What it means to be a 'good' teacher, and the characteristics exhibited by good teachers. 2. The current status of teaching. 3. Barriers to participate in courses. The multiple roles that clinical teachers have was highlighted as a reason for non-attendance.	Non-attendance at development courses is multifactorial; teaching is a 'natural skill' that is difficult to train and teaching has a lower priority than other activities.
PS3	2011	Gallagher and Newman	Structured interviews were conducted with nineteen clinical teacher participants who were at least 100 kilometres away from medical school.	Five broad themes were identified: 1. The need to feel connected 2. the need for regular feedback on performance 3. A general level of comfort with educational technology 4. The desire for clarity in the role of clinical teacher	Synchronous videoconferencing does not fit with 'just-in-time-provision, but could be useful to provide support.

Code	Year	Author(s)	Methods and methodology	Key findings	Theme(s)
				5. A high-level of self-motivation and problem solving	
PS4	2010	Swanwick, McKimm and Clarke.	Semi-structured questionnaires (187 participants) and focus groups (23 participants) regarding the introduction of a professional development framework, across sixteen acute, mental health, foundation and primary care Trusts. Thematic analysis conducted.	Seven evaluation themes emerged from the data: 1. Clarity of overall processes of training and supervision 2. Alignment with other accreditation processes 3. Supervision within the organisational context 4. Engagement and motivation of supervisors 5. Implications for management and administrative infrastructure 6. Documents and processes 7. Impact	Development can be implemented at a local level. A clear and unambiguous developmental framework is needed, that can be applied across specialties and integrated into existing appraisal. Issues of motivation, recognition and reward need to be addressed.
PS5	2009	Ahmady	Mixed-methods approach, incorporating document analysis, surveys and interviews with clinical teachers. Qualitative content analysis strategy applied to data.	High levels of role stress among teachers, relating to role overload, inter-role distance, resources inadequacy and role-expectation conflict. Seven steps in designing faculty development programmes: 1. Identifying teacher goals 2. Identifying institutional goals 3. Identifying teachers needs	Success of staff development initiatives depend on key factors: 1. Identification of staff needs 2. Early involvement of teachers 3. Introduction of training programmes (and securing their continuity)

Code	Year	Author(s)	Methods and methodology	Key findings	Theme(s)
				4. Identifying organisational needs 5. Selecting which if the identified needs to address 6. Identifying optimal strategies for addressing a selected need 7. Delivering strategies	4. Development is a necessary outcome of staff evaluation
PS6	2009	Cook	Semi-structured interviews and a 'concept map' to explore non-formal learning processes of twelve novice medical teachers across hospital, general practice and medical school settings.	Non-formal learning occurs across a number of key areas, including task and role performance, personal development and optimising clinical teaching. Learning occurs as a result of observation, experience, personal reflection and student feedback.	Non-formal learning plays significant role in teacher development. Process should be enhanced, and take into account individual needs.
PS7	2008	Weurlander and Stenfors-Hayes	Semi-structured interviews conducted with nineteen clinical teachers one year after their participation in a staff development course.	Reported changes in teaching practice included use or development of new teaching activities, changes in the planning or structuring of teaching sessions and changes in thinking about teaching and learning. Development after the course was categorised as moving: 1. from unaware to aware of the learning process. 2. From own experience to shared experiences.	Courses are a means to educational development

Code	Year	Author(s)	Methods and methodology	Key findings	Theme(s)
				3. From intuition to confirmation. 4. From focus on teaching to focus on learning.	
PS8	2008	Zibrowski, Weston and Goldszmidt	Questionnaire completed by seventy-three medical faculty as part of a larger cross-sectional, mixed methods needs assessment in relation to educational scholarship.	Main barrier to educational scholarship was lack of protected time, around three main themes: 1. Fragmentation (where opportunities are sporadic) 2. Prioritisation (where work responsibilities compete for time, and where there is difficulty securing paid time). 3. Motivation (recognition and support for education work by the department and individual is limited).	Institutional support mechanisms are necessary to enable clinical teachers to engage in educational scholarship.
PS9	2007	Harris <i>et al.</i>	Expert advisory group developed a document delineating competencies required for successful medical faculty.	Core competencies for teaching included: 1. Engages learners 2. Organises and conveys teaching points at appropriate level 3. Solicits questions and summarises main points to reinforce learning 4. Identifies learners needs 5. Negotiates learning objectives and selects appropriate teaching methods 6. Presents a lecture on a clinical or educational topic	Competencies all relate to practical skills, rather than personal attributes or values.

Code	Year	Author(s)	Methods and methodology	Key findings	Theme(s)
				7. Makes appropriate use of audio-visual aids and handouts 8. Designs and uses evaluation to make improvements 9. Uses learner strengths and deficiencies to establish future learning activities 10. Demonstrates one-on-one teaching 11. Facilitates small group sessions	
PS10	2007	Åkerlind	Twenty-eight academics were interviewed, taken from a purposive sample for maximum variation.	Three desired outcomes for development programmes: 1. Achieve greater comfort and confidence as a teacher 2. Develop a repertoire of skills and strategies 3. Improve student learning and development Five intentional acts of development: 1. Increasing content knowledge 2. Acquiring practical experience 3. Accumulating teaching strategies 4. Finding out what works, from the teachers' perspective	Development must be linked to individual teachers requirements and needs.

Code	Year	Author(s)	Methods and methodology	Key findings	Theme(s)
				5. Finding out what works, from the students' perspective.	
PS11	2007	Srinivasan <i>et al.</i>	Four years of teaching scholars (twenty-six participants) who had completed the cross-disciplinary teaching scholars programme for human and veterinary medicine faculty were surveyed.	<p>Barriers to participation were reported as:</p> <ol style="list-style-type: none"> 1. Competing clinical and teaching duties 2. Geographical location 3. Out of class work 'cumbersome' 4. Too much material in sessions. <p>Facilitators were listed as being:</p> <ol style="list-style-type: none"> 1. Quality of collegial interactions 2. Intellectual stimulation 3. Creativity of course material 4. Half-day format 5. Internal departmental support 	<p>Working with diverse faculty was beneficial in terms of 'cross-pollination'</p> <p>New opportunities as a result of staff development</p>
PS12	2006	Dahlgren <i>et al.</i>	Three pairs of critical friends were formed. Each pair were experienced medical teachers, and gave one lecture and one seminar in their area of expertise. Semi-structured interviews were conducted with each participant.	<p>Each participant reflected on their teaching differently after the research than before, and each made changes to their teaching.</p> <p>Being a critical friend may be more beneficial than having one.</p> <p>Feedback was positive and valuable.</p>	Critical friends should be a part of regular teaching practice.

Code	Year	Author(s)	Methods and methodology	Key findings	Theme(s)
PS13	2006	Hatem, Lown and Newman.	Semi-structured interviews with previous graduates of a fellowship programme.	Fellows have assumed significant institutional educational roles following completion of their training programme. Fellowship projects such as innovative curricula and new teaching models have become part of institutional practice.	Formal fellowship programmes facilitate professional progression and innovative educational practice.
PS14	2006	McLeod <i>et al.</i>	A 50-item multiple-choice question test based on pedagogic principles was completed by seventy-two clinical teachers representing five different groups of clinicians and educators.	Teachers from all five groups performed well in relation to their pedagogic knowledge, but those participants who were recognised as local experts, or who held advanced education degrees performed best. All participants performed best on questions where procedural knowledge was necessary.	Clinical teachers possess tacit knowledge of pedagogic principles.
PS15	2006	Searle, Thompson and Perkowski.	Open-ended questionnaire completed by sixty-one graduates of a fellowship programme.	Participants reported that the programme had a positive impact in each of ten areas: 1. Reflecting on teaching 2. Evaluation of learners 3. Large group teaching 4. Small group teaching 5. Networking with other faculty 6. Enduring educational material	Inter-disciplinary programmes of teacher development aid in the establishment of a collaborative network and a more flexible approach (allowing a more tailored approach).

Code	Year	Author(s)	Methods and methodology	Key findings	Theme(s)
				7. Educational leadership-college 8. Educational leadership-department 9. Educational research 10. Use of educational literature	
PS16	2005	MacDougall and Drummond	Semi-structured interviews with ten experienced medical teachers. Grounded theory used as framework for qualitative analysis.	Four distinct areas were identified as important for clinical teacher development: 1. Development of educational knowledge and skills. 2. Practice and modelling of teaching skills. 3. Motivation and encouragement of clinical teachers. 4. Constraints on teaching and learning.	Model for teacher development begins with doctors as learners, progressing to teach and practice skills, moving to reflection on teaching.
PS17	2003	Armstrong, Doyle and Bennett	Follow-up survey of sixty-three teacher development programme attendees two years after their participation.	Participants reported that the development programme had significantly affected their professional development, including long-term changes in teaching behaviour, engagement in new educational activities such as committee work and grant funding and renewed vitality / self-identification as educators.	Professional development programmes that offer an immersive, high-challenge, high-support experience, emphasising experiential and participatory activities can change behaviour in an enduring way.

Code	Year	Author(s)	Methods and methodology	Key findings	Theme(s)
PS18	2003	Pololi <i>et al.</i>	Multi-faceted approach, including semi-structured interviews, nominal group technique and a questionnaire for all faculty in a single medical school.	<p>All faculty groups prioritised:</p> <ol style="list-style-type: none"> 1. Learning for sustaining vitality 2. Balancing personal and professional lives 3. Finding meaning in their work 4. Relationships 5. Personal growth <p>Administrators prioritised (for faculty):</p> <ol style="list-style-type: none"> 1. Time management 2. Institutional outlook 3. Team work 4. Improved performance in teaching, research and clinical practice <p>Junior faculty prioritised:</p> <ol style="list-style-type: none"> 1. Mentoring 2. Scholarship 3. Research 4. Career planning 	While there are some areas of shared priorities, other priorities vary according to role and career stage.

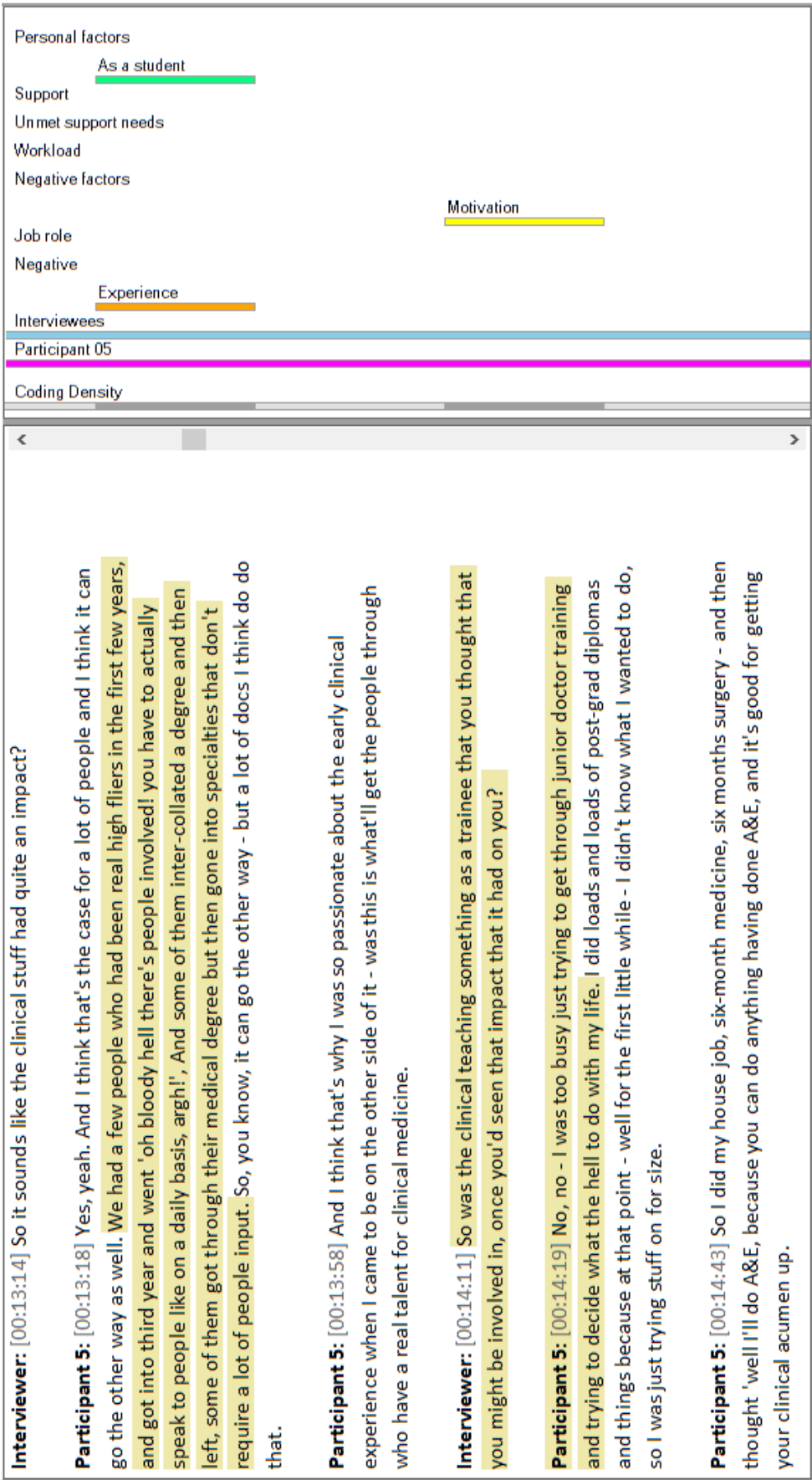
8.5 Appendix 5 – Indicative interview question schedule

Indicative Question Schedule

Theme for investigation	Specific Questions
Introductory questions to put the participant at ease	<p>Tell me a little bit about your role as a clinical teacher for MBBS students – how long have you been doing this?</p> <p>What professional background do you come from?</p> <p>How would you summarise your own experience of being an undergraduate learner?</p>
Motivation and identity	<p>Is clinical teaching something you thought you would be involved in when you were a trainee yourself?</p> <p>When did you first encounter the role?</p> <p>What was your impression of the role at the time?</p> <p>How do you view yourself as a teacher?</p> <p>Why did you become a clinical teacher?</p> <p>Has this changed over time? If so, how? Why do you think this is?</p> <p>Who has benefitted the most from you becoming a clinical teacher?</p> <p>How long do you think you will continue in this role? Why is that?</p>
Development and support	<p>How were you prepared for your role as a clinical teacher?</p>

	How are you supported in your role, and by whom?
Experiences	<p>Have you have enjoyed your role so far?</p> <p>Do you have any 'stand out' experiences that you'd like to tell me about?</p> <p>Why do these experiences resonate with you particularly?</p> <p>If you were promoting this role to a colleague, what points would you make?</p> <p>If that colleague asked you about the negative aspects of the role, what would you tell them?</p> <p>How did the experience match up to your expectations, and the information you were given before you took on the role?</p> <p>Could the experience be improved for you? If so, how?</p>

8.6 Appendix 6 – Example of coding



Support			
Job role			
As a student			
Students			
		Motivation	
Negative			
Positive			
Experience			
Interviewees			
Participant 09			
Coding Density			

<

>

Participant 9: [00:03:23] I must admit I probably was quite driven, probably more than... possibly, you know, with hindsight I'd probably say possibly more than most of my cohort. So, I was always very much taking on the opportunities on the wards and things. And that was quite, you know, turned into, you know, quite long days going between your classroom based stuff and the wards. I remember when I used to drive everyone in my house to (name of base unit) coming home and kind of falling asleep. Really put in the effort in there. But it obviously paid off well. I really enjoyed third year overall.

Participant 9: [00:03:55] I suppose forth year's a bit of a... it was just a bit of fun really, I can't even remember it. I think fourth year was when I started thinking about more I want to do with my career. So, picking my SSCs and electives around that and I don't know how formative that was actually in my career choices? But I did a lot of varied things throughout SSCs and elective.

Participant 9: [00:04:17] I did my final year in (name of current base unit). So - which probably shaped me a lot in applying for this job, because I had experience of the teaching fellows as a student - so I ended up wanting... So that's when I first caught sight that the job was something I'd quite like to do - I had my sights on it for a while (laughs).

Participant 9: [00:04:34] And fifth year was a good experience - again disorientating for a different reason, because we went to (far side of the base unit) a couple of friends and I for the first part of it which although I look back on very fondly, I was keen to keep coming back to (name of University city) which probably wasn't ideal, I probably should have just stayed (over there) and done my bit. So that was just personally, I liked being at home. So, I kept driving back and forth. And although didn't find any problem integrating back into (the main base unit area) here because everyone's just so nice really. And that was probably about it I've got nothing too

memo's to self for consideration

How do you separate motivation from experience? Perhaps 'perception', or 'feel'?
→ Ames + Ames, 1984.

'life stages' → P1, continuation?

Dictionary definition - motivation is a reason or reasons for acting in a particular way.

'code source' → whole doc. in NVivo

'code selection' → highlights passages. ✓

Coding stripes useful to check coding process.

Coding for 'motivation' is huge and varied, but breaking down into factors gives me the sense that the overall meaning is lost

8.7 Appendix 8 – Open University Human Research Ethics Committee (HREC) approval

Human Research Ethics Committee (HREC)

From Dr Duncan Banks, Deputy Chair
The Open University Human Research Ethics Committee
Email duncan.banks@open.ac.uk
Extension (6) 59198
To Sonia Bussey, CREET
Project title A case study to explore the experiences of MBBS Clinical Teachers –
motivation, identity and support.
HREC ref HREC/2016/2440/Bussey/1
AMS ref n/a



Memorandum

Date application submitted: 06/04/17
Date of HREC response: 16/04/17

This memorandum is to confirm that the research protocol for the above-named research project, as submitted to the OU HREC for ethics review, has been given a favourable opinion by the HREC review panel.

Please note the following:

1. You are responsible for notifying the HREC immediately of any information received by you, or of which you become aware which would cast doubt on, or alter, any information contained in the original application, or a later amendment which would raise questions about the safety and/or continued conduct of the research.
2. It is essential that any proposed amendments to the research are sent to the HREC for review, so they can be recorded and a favourable opinion given prior to any changes being implemented (except only in cases of emergency when the welfare of the participant or researcher is or may be effected).
3. Please include your HREC reference number in any documents or correspondence, also any publicity seeking participants or advertising your research, so it is clear that it has been reviewed by HREC and adheres to OU ethics review processes.
4. You are authorised to present this memorandum to outside bodies such as NHS Research Ethics Committees in support of any application for future research clearance. Also, where there is an external ethics review, a copy of the application and outcome should be sent to the HREC.
5. OU research ethics review procedures are fully compliant with the majority of grant awarding bodies and where they exist, their frameworks for research ethics.
6. At the conclusion of your project, by the date you have stated in your application, you are required to provide the Committee with a final report to reflect how the project has progressed, and importantly whether any ethics issues arose and how they were dealt with. A copy of the final report template can be found on the research ethics website - http://www.open.ac.uk/research/ethics/human-research/human-research-ethics-full-review-process-and-proforma#final_report

Best regards,

Dr Duncan Banks, Deputy Chair
The Open University Human Research Ethics Committee

<http://www.open.ac.uk/research/ethics/>

www.open.ac.uk/research/ethics/

March 2015

Project Information Sheet

‘Teaching undergraduate medical students; exploring the clinical teacher experience’

<p>The aim(s) of the project</p>	<p>This project is being undertaken as the research project for the award of a Doctorate in Education by the Open University.</p> <p>The key aim of the project is to investigate the experiences of clinical teachers for the foundations of clinical practice (FoCP) rotation of the University MBBS programme, with particular reference to:</p> <ol style="list-style-type: none"> 1. How do clinical teachers experience their role? <ul style="list-style-type: none"> - What do clinical teachers think their role is? - How do clinical teachers perceive their identity as a teacher, and to what extent does that integrate with their identity as a clinician? - How do differences in professional background impact on the experiences or perceptions of clinical teachers? 2. How are clinical teachers prepared for and supported in their role? <ul style="list-style-type: none"> - How do healthcare organisations and the university prepare, support and develop their clinical teachers? - What do clinical teachers consider important in terms of training, support and development? - To what extent do the perspectives of clinical teachers and organisations align regarding preparation, support and development?
<p>The type(s) of data to be collected</p>	<p>Information will be collected relating to your opinions and experiences of clinical teaching, along with other organisational data such as any institutional policies or standards relating to your clinical teacher role.</p>

The method(s) of collecting data	Interviews will be used to collect data, in addition to the collection of original institutional documents.
Confidentiality	All data will be anonymised in terms of your personal details to ensure your confidentiality and privacy is maintained.
Compliance with the Data Protection and Freedom of Information Acts	<p>All data collected will be stored in line with the requirements of the Data Protection Act:</p> <ul style="list-style-type: none"> • Digital recordings of interviews will be saved to computer as soon as possible following the interview, deleted from the recorder, and given an identifying code. This code will be stored in hard copy, in a locked filing cabinet. • All transcripts and recordings will be stored on a password protected computer, which only the principal investigator can access. • All recordings and transcripts will be retained for a period of five years.
Time commitment expected from participants	Your interview will not usually exceed one hour.
Withdrawing from the study	<p>You have the right to withdraw your data from the study up until 1st September 2017, with no adverse consequences.</p> <p>After this date, all the data will be entered into a joint analysis, making identification and removal impossible.</p> <p>To withdraw from the study, please contact the principal investigator (Sonia Bussey), using the contact details below.</p>
The opportunity to have any supplied data destroyed	Once the data are prepared for analysis, and all personal identifiers removed, it will no longer be possible to locate your individual data.

Risks to participants	There are no identified risks associated with participation.
Recompense arrangements	There are no arrangements to offer financial compensation for your time or travel. However, events will be held as close to you as possible to minimise travel requirements.
Name and contact details of the Principal Investigator	Sonia Bussey s.r.bussey@open.ac.uk (telephone 07500 058847)
Name and contact details of Primary Supervisor	Professor Judith Lathlean J.Lathlean@soton.ac.uk In the event that you have an enquiry that cannot be satisfactorily resolved with the Principal Investigator, the Primary Supervisor should be contacted.
Insurance indemnity arrangements for the research	<p>The OU possesses the following insurance cover in relation to this research:</p> <p>Employers Liability</p> <p>Legal Liability to pay damages and costs up to £10,000,000 following death, illness and disease sustained by employees in the course of and arising out of their employment.</p> <p>Public/Products Liability</p> <p>Indemnity Insurance limited to £10,000,000 in respect of its legal liability for accidental bodily injury including death, illness and disease to a person (other than the employee if such injury arises out of and in the course of employment by the insured) or loss of or accidental damage to property arising out of the insured's business.</p> <p>Professional Indemnity</p> <p>The University is indemnified for sums which they become legally liable to pay arising from any claim made against them during the year of insurance as a</p>

	<p>direct result of any negligent act, error or omission in the professional conduct of the University's business, up to a limit of £10,000,000.</p> <p>These are subject to normal policy terms, conditions and exceptions. Please feel free to contact the principal investigator for further details</p>
Debriefing of participants	After all data have been collected, a summary of the findings will be sent to you via email.
How the results of the research will be made available to participants	<p>An executive summary of the research will be emailed to you once the project is complete.</p> <p>The email address used will be the one you provide on the initial consent form (unless you ask otherwise).</p>

8.9 Appendix 10 - Participant consent form

Participant Consent Form

'Teaching undergraduate medical students; exploring the clinical teacher experience'

Centre for Research in Education and Educational Technology (CREET)

'Teaching undergraduate medical students; exploring the clinical teacher experience'

(name of project)

Agreement to Participate

I,

(print name)

agree to take part in this research project.

I have had the purposes of the research project explained to me.

I have been informed that I may refuse to participate at any point by simply saying so.

I have been assured that my confidentiality will be protected as specified in the Project Information Sheet.

I agree that the information that I provide can be used for educational or research purposes, including publication.

I understand that if I have any concerns or difficulties I can contact:

Sonia Bussey

at:

S.R.Bussey@open.ac.uk

Telephone – 07500 058 847

(name of the researcher)

If I want to talk to someone else about this project, I can contact the project supervisor at:

Professor Judith Lathlean

J.Lathlean@soton.ac.uk

I assign the copyright for my contribution to the Faculty for use in education, research and publication.

Signed:

Date:

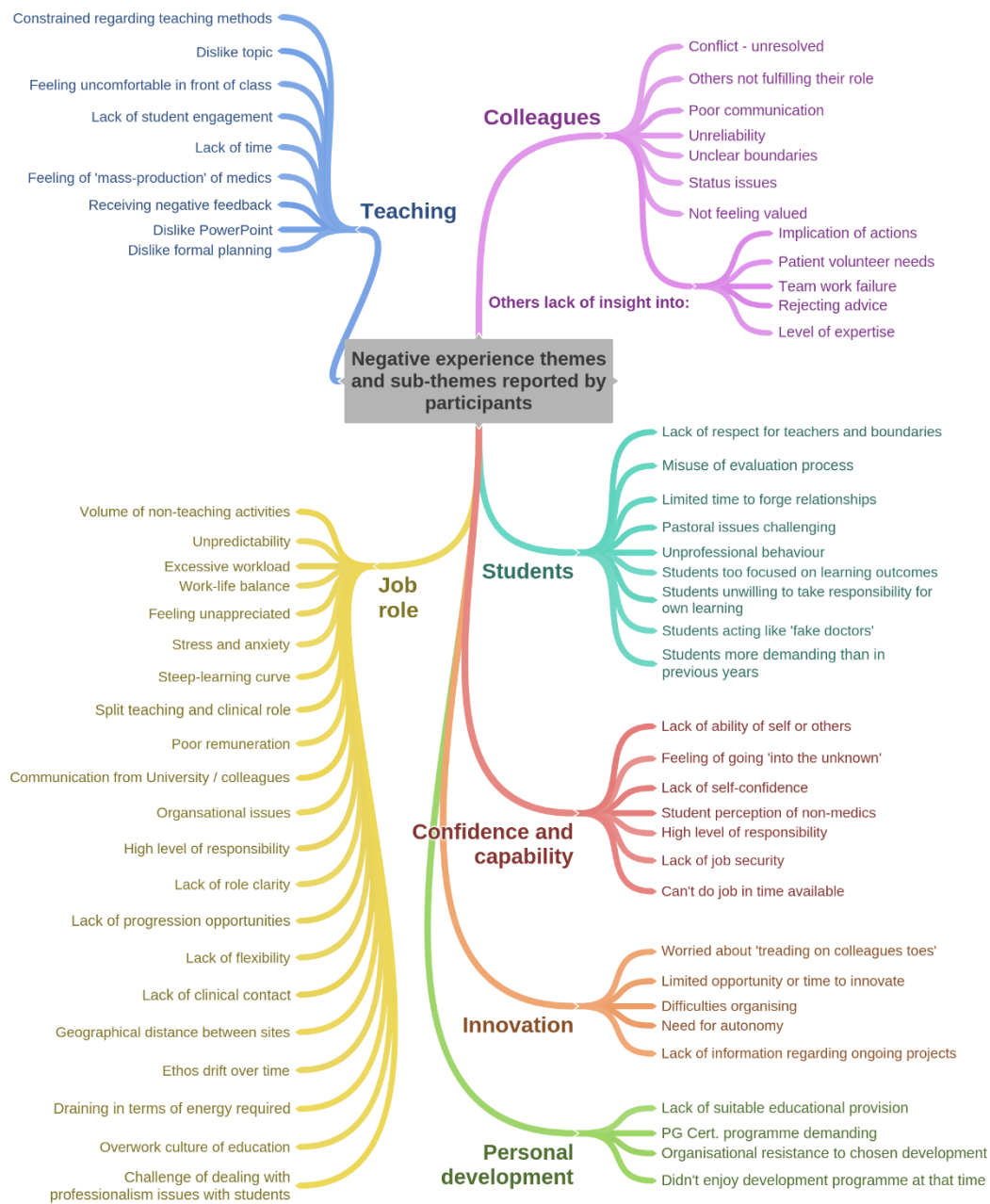
I would like to receive a copy of the executive summary, and include my email address:

Email:

8.10 Appendix 11 – Positive and negative experience themes and sub-themes



Positive experience themes and sub-themes reported by participants



Negative experience themes and sub-themes reported by participants